MEDICAL WORLD NEWS

JANUARY 6, 1961

Largest Man-Made Protein

66 Ob-Gyn Professors Take Stand on Birth Control

Sen. Kefauver, Austin Smith Assess the Drug Hearings

READ WHY THIS IS TODAY'S MOST ADVANCED SURGICAL ADHESIVE TAPE

Here is a dramatically new and different surgical adhesive tape. We urge you to try it. Quite possibly it is the tape you will wish to use in your practice and recommend to your patients from now on.

Three years under development in the Medical Research Laboratories of 3M Company, now proved in extensive clinical trial,[1] this new tape has physical properties completely different from those of any other existing surgical adhesive. It offers equally unprecedented advantages in use.

PROPERTY: tissue-thin microporous backing and adhesive—the first truly nonocclusive tape. **ADVANTAGE:** prevents maceration and mechanical irritation. Cool, lightweight, comfortable. Easy to tear, handle, apply.

PROPERTY: new, physiologically inert synthetic components—contains no natural rubbers or resins. **ADVANTAGE:** nonirritating, virtually eliminates traditional problems of chemical irritation even in markedly tape-sensitive patients.

PROPERTY: thin, non-creeping copolymer adhesive does not entrap hairs, yet outholds previous tapes. **ADVANTAGE:** easily removed without painful depilation. Sticks even in baths. Requires fewer changes.

Available through your surgical supply dealer or pharmacy in usual widths, ½″ to 3″, 10 yard rolls. To receive a trial sample, write to 3M Company, St. Paul 6, Minnesota.

MINNESOTA MINING AND MANUFACTURING COMPANY

...WHERE RESEARCH IS THE KEY TO TOMORROW

Reg. U.S. Pat. Off.

Scotch Brand SURGICAL TAPE MICROPOROUS

NO. 530

"SCOTCH" is a registered trademark of 3M Co.

1. Golden, T.: Am. J. Surg. 100: 789, 1960.

CORIFORTE Capsules

(formerly CORICIDIN FORTE)

Schering

quickly relieve mild to severe U.R.I. symptoms

rapidly relieve **sneezing, nasal stuffiness, tearing**

reduce **fever and chills,** ease **aches and pains**

lift **depressed feelings**

supply **vitamin C for stress support**

available on your prescription only

Each CORIFORTE™ capsule contains:

CHLOR-TRIMETON® Maleate (chlorpheniramine maleate)	4 mg.
Salicylamide	0.19 Gm.
Phenacetin	0.13 Gm.
Caffeine	.30 mg.
Methamphetamine Hydrochloride	1.25 mg.
Ascorbic Acid	.50 mg.

Supplied: Bottles of 100 and 1000.

VOL. 2, NO. 1

MEDICAL WORLD NEWS

THE NEWSMAGAZINE OF MEDICINE

JANUARY 6, 1961

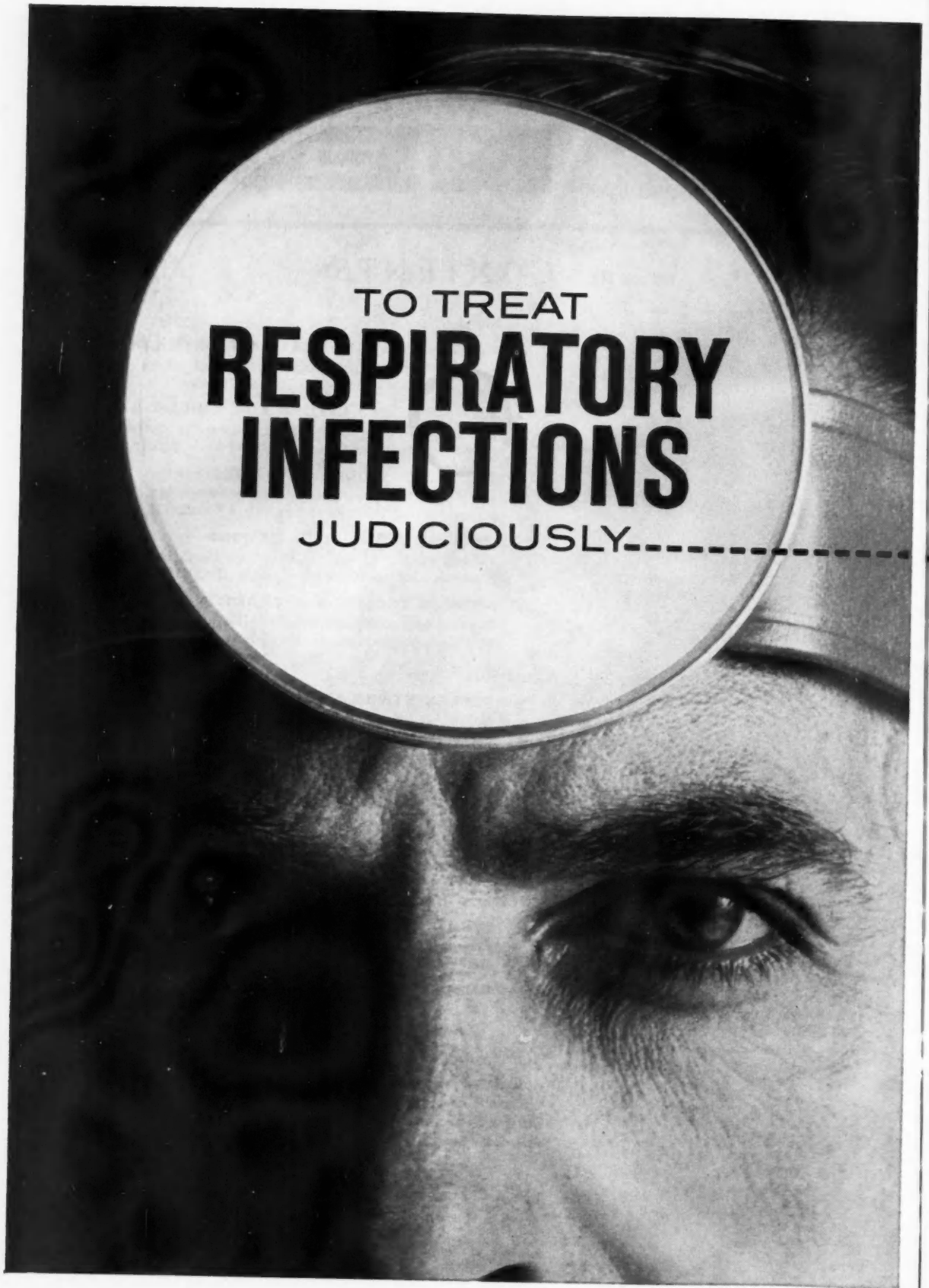
CONTENTS

On the cover: Among the medical highlights of 1960 was the synthesis of ACTH by Drs. Haruaki Yajima and Klaus Hofmann of Pittsburgh
Story on p. 31

Departments

MEDICAL WORLD NEWS is published bi-weekly by Medical World Publishing Company, Inc., 30 Rockefeller Plaza West, New York 20, N. Y. Accepted as controlled circulation publication at Fairview, New Jersey. Subscription rates: $12.50 per year to non-professionals; $6.00 to non-qualifying physicians or persons in allied professions; $15.00 for foreign subscriptions; single copies, 60 cents.

CHANGE OF ADDRESS: Notification should be sent to Medical World News, 30 Rockefeller Plaza West, New York 20, N. Y. Please give both old and new addresses, including zone numbers, if any. Printed in U.S.A. POSTMASTER: Please send form 3579 to Medical World Publishing Company, Inc., 30 Rockefeller Plaza West, New York 20, N. Y.


TO TREAT
RESPIRATORY
INFECTIONS
JUDICIOUSLY

When it's penicillin-susceptible
and the patient is not allergic
Use an orally maximal penicillin

MAXIPEN®

potassium phenethicillin

Consistent dependable therapeutic response through maximal absorption, maximal serum concentration and longer duration of inhibitory antibiotic levels for less susceptible organisms.

Available as Maxipen Tablets, 125 mg. and 250 mg.; Maxipen for Oral Solution, 125 mg. per 5 cc. of reconstituted liquid.

Literature on request

or

When you hesitate to use penicillin
(eg. possible bacterial resistance or allergic patient)

You can count on

TAO®

triacetyloleandomycin

Extends the Gram-positive spectrum of usefulness to include many staphylococci resistant to one or more of the commonly used antibiotics...*narrows* the spectrum of side effects by avoiding many allergic reactions and changes in intestinal bacterial balance.

Available as Tao Capsules, 250 and 125 mg.; Tao Oral Suspension, 125 mg. per 5 cc; Tao Pediatric Drops, 100 mg. per cc. of reconstituted liquid; Intramuscular or Intravenous as oleandomycin phosphate. Other Tao formulations also available: Tao®-AC (Tao, analgesic, antihistaminic compound) Tablets; Taomid® (Tao with Triple Sulfas) Tablets, Oral Suspension.

Literature on request

and for nutritional support **VITERRA®** vitamins and minerals
Formulated from Pfizer's line of fine pharmaceutical products

New York 17, N. Y., Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being™

LATE NEWS

NEW VACCINE MADE FROM PERTUSSIS EXTRACT

A new approach to the old problem of pertussis appears to be paying off.

Vaccine made from an antigenic extract of Bordetella pertussis produces a high degree of antibody formation but few systemic reactions, particularly in infants under three months old, according to Drs. Carl Weihl of Cincinnati General Hospital, H. D. Riley, Jr., University Hospital in Oklahoma City and Joseph Lapin of Bronx Hospital, New York.

The vaccine, combined with alum-precipitated diphtheria and tetanus toxoids, was given in three 0.5 ml doses, at four to six week intervals, to 533 children. The incidence of febrile reactions was 11 per cent, compared to 51 per cent with whole-cell vaccines. Antibody response in infants under three months was 97 per cent, compared to 54 per cent with whole-cell vaccine; in infants over three months, the response was 93.5 and 64 per cent, respectively.

The low reaction rate is achieved with no sacrifice in potency, says Dr. Weihl. "Field studies have shown a good correlation between standard mouse potency tests, the occurrence of agglutinating antibody and clinical immunity following whole-cell pertussis vaccine administration." Agglutinating antibody response to the new vaccine is at least equal to that obtainable with whole-cell vaccines, perhaps superior, says Dr. Weihl. "Because pertussis mortality is highest in the first year of life, this antibody response in very young infants is particularly important."

UNDETECTED TRACHEAL CYSTS MAY CAUSE INFANT DEATHS

Congenital cysts between the trachea and esophagus can be unrecognized killers of infants, according to Dr. Joseph W. Peabody, Jr., clinical assistant professor of thoracic surgery, Georgetown University School of Medicine, Washington, D. C.

The physician who x-rays a baby with breathing difficulty due to such a cyst may see the bulging growth in the lateral view. But he frequently does not link the cyst to the breathing difficulty, Dr. Peabody told the American College of Chest Physicians at its meeting in Washington.

Dr. Peabody reviewed autopsy records in several New Orleans hospitals and found that the cause of death—despite the listing of x-ray findings of a cyst—was often given as croup or asthma. But he is convinced that the actual cause of death was asphyxia due to compression of the trachea by the cyst.

MYOCARDIAL DEGENERATION REVERSED BY PROLONGED REST

Complete bed rest has restored normal heart size in over 75 per cent of 20 patients with idiopathic myocardial degeneration, reports Dr. George E. Burch, of Tulane University, New Orleans.

The patients, all of whom had proven intractable to various therapies, were kept in bed for periods up to a year, says the New Orleans clinician. They were permitted no exercise beyond that involved in feeding themselves and moving about in bed, and received no additional medication or special food other than "a good American diet."

Decrease in heart size generally began in about six months. The results, says Dr. Burch, "indicate that idiopathic myocardial degeneration is reversible if caught in time."

NEW LABELING CHANGES ANNOUNCED BY THE FDA

To insure that physicians will be aware of both the hazards and the advantages of prescription drug products, the Food and Drug Administration has announced new regulations requiring changes in labeling.

Among the FDA's major changes:

- Labels of drugs for injection must declare the quantity or proportion of all inactive as well as active ingredients. Previously, inactive ingredients merely had to be listed.
- Labels of prescription drugs must bear identifying lot or control numbers through which their manufacturing history can be traced.
- Any labeling that furnishes information about uses or dosage of a drug product must also contain complete information about relevant hazards and contraindications.

The new regulations also provide that permission to market a new drug product can be denied if the manufacturer refuses to allow inspection of his facilities, controls or records. Action on packaged inserts for prescription products has been deferred so the American Medical Association can study the FDA proposals.

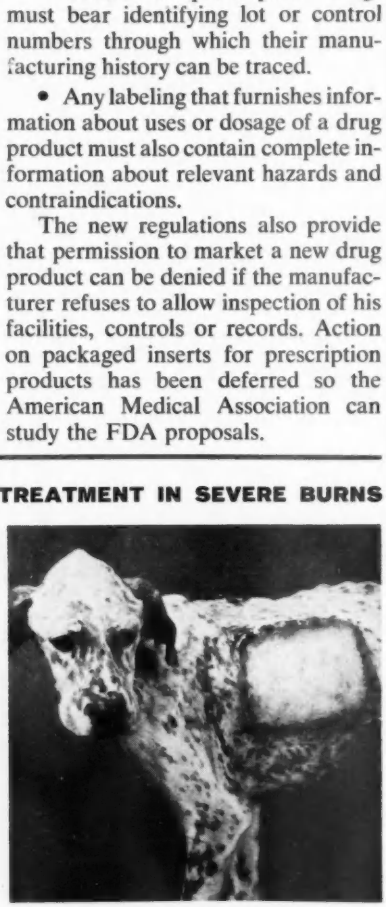
SYNTHETIC SKIN USED TO AID TREATMENT IN SEVERE BURNS

Use of a skin substitute—polyvinyl sponge covered with silicone rubber —may help to prevent the massive and chronic infection which is now the chief cause of death in lethal burns.

Up to 35 per cent of skin has been replaced with the prosthetic material by Dr. William M. Chardack, chief of surgery at the Buffalo Veterans Administration Hospital, in work with dogs and pigs.

Reporting to the VA's annual Medical Research Conference in Cincinnati, Dr. Chardack noted that in addition to preventing infection, the synthetic material is so durable that it can remain in place for two to three months. Its eventual replacement by autografts can thus be carried out in a leisurely, strip-by-strip fashion.

Other advantages of the new material are its potential availability in unlimited quantity and dimension, as well as the "absence of storage problems and freedom from deterioration regardless of the quality and quantity of the underlying blood supply." Moreover, infections can be easily treated by removing the outer silicone layer and applying surface antibiotics through the porous sponge.



SPONGE skin is patent after seven days.

X-RAY DIAGNOSIS MAY BE INSUFFICIENT IN ILEUS

Intestinal occlusion does not always show up on x-rays, say four Philadelphia physicians.

Reporting to the American College of Gastroenterology, Dr. Jerry Zaslow and three colleagues cite nine cases of complete ileal obstruction, all with normal roentgenographic findings. The cases include a closed-loop obstruction, an internal hernia and an acutely inflamed Meckel's diverticulum.

The main indication for laparotomy in all nine patients, says Dr. Zaslow, was "marked abdominal tenderness with or without rigidity." Tenderness, he declares, can exist even in early cases before gangrene has developed. Among such patients, prompt surgery can be "simple and definitive."

The Philadelphia specialist notes that the typical x-ray picture in ileus —small loops distended with air and fluid—may be absent if the condition is of recent onset or if the patient has not swallowed sufficient air. In closed-loop obstruction no air can enter.

Roentgen examination, he concludes, is no substitute for "an accurate history and careful physical examination."

OSTEOARTHRITIC PAIN MIMICS SIGN OF MYOCARDIAL INFARCT

Pain, usually a most useful diagnostic aid, can also be one of the most misleading. Osteoarthritic changes in the apophyseal joints of the neck, for example, can cause severe chest pain similar to that accompanying myocardial infarction.

Dr. Norrie Swanson of Toronto General Hospital and Sunnybrook Veterans' Hospital told the Second Canadian Conference on Research in the Rheumatic Diseases, in Toronto, of 18 cases in which a diagnosis of myocardial infarction was incorrectly made. Seven of the 18 were physicians and two were dentists.

Several of the patients, all with normal hearts and normal cardiograms, spent six weeks in the hospital before the true nature of the pain was recognized — the cervical radicular syndrome, secondary to osteoarthritis.

The mode of onset of the two types of pain is different, points out Dr. Swanson. The arthritic pain occurs when the head is moved, and not after exertion. There is tenderness in chest muscles and either pain or loss of feeling of the outer, not the inner, arm; the patient may be dizzy. Nitroglycerin does not affect this syndrome but neck traction does.

HYPNOTIC ANESTHESIA SUGGESTED FOR LAB ANIMALS

Simple hypnotic techniques, described at the 11th annual meeting of the Animal Care Panel in St. Louis, can effectively mesmerize rabbits, guinea pigs, mice, fowl and even snakes, which sometimes become so stiff they can be picked up like sticks.

There are a variety of methods, depending upon the animal and the depth of trance desired, according to A. James Fendrick, head of the animal care unit of Smith Kline & French Laboratories, Philadelphia. A firm blindfolding hold on the animal's head while its abdomen is being caressed, for example, will dispatch rabbits and guinea pigs into such ecstasy that they will stay prone and passive for removal of blood from the ear or even for cardiac puncture, according to Mr. Fendrick.

SUSCEPTIBILITY TO DELAYED SERUM SICKNESS CAN NOW BE DETERMINED

For the first time, the patient's susceptibility to delayed serum sickness can be assessed before he receives tetanus antitoxin (TAT).

The diagnosis is determined by reaction between a sample of the patient's serum and a special preparation of horse serum and human erythrocytes, reports Dr. Carl E. Arbesman and his co-workers at the University of Buffalo School of Medicine.

In a group of 71 patients, Dr. Arbesman found 15 developed serum sickness 8 to 10 days after receiving TAT. Before the injection, 14 of these 15 had titers of 1,000 or higher. All but one of 56 patients who suffered no ill effects from TAT had titers below 1,000.

Dr. Arbesman points out that the practical advantage of this test is that the susceptible patient who must receive TAT can be given corticosteroids or antihistamines as prophylactic measures before serum sickness has an opportunity to develop.

CONTINUED

TV X-RAY UNIT USES LOWER RADIATION LEVELS

The drama of internal organ activity can now be televised by x-ray without the use of a fluoroscope.

A unit called *Televex,* developed by Westinghouse and Dr. Bertram R. Girdnay, chief radiologist of Children's Hospital, Pittsburgh, sends the x-rays through the patient and makes them visible for motion studies with a unique image amplifier. In a conventional TV x-ray system, a fluoroscope changes the rays into visible light. But to do so requires "increased amounts of radiation," Dr. Girdnay says.

Televex, in contrast, uses "the same low radiation level as ordinary fluoroscopes," he points out. The reason: Its amplifier intensifies the image 1,500 times. A TV camera tube then picks up this image and transmits a picture to one or more TV monitors with 17-inch screens. Another electronic gadget magnifies the image for close-up viewing. The unit is now on the market.

Another company, General Electric, has built a one-of-a-kind fluoroscope named *Teletrol,* which has the special feature of being operable by remote control. Not yet on sale, *Teletrol* provoked a split decision from specialists when exhibited at the Radiological Society of North America at its annual meeting in Cincinnati.

LIVE TV shows x-ray of internal organs.

Fifty per cent of the radiologists said that remote control means loss of patient contact. The other 50 per cent disagreed. One radiologist, in fact, offered G. E. $150,000 for the machine.

LATE NEWS CONTINUED

PLACEBO GIVEN BY INJECTION TOPS PLACEBO BY MOUTH

Placebos given by injection are more effective than those administered orally.

Three University of Mississippi physicians reached this conclusion after a three-year double blind study of 134 patients who received oral or parenteral drugs to lower blood pressure, and oral or parenteral placebos.

Seventy of the patients were given injections every other week. Half got hydrogenated ergot alkaloids, a hypotensive agent, the other half, placebos.

The decrease in blood pressure in the placebo-injected group was comparable to the decrease in the group receiving the active agent. Systolic blood pressure decreased for as long as 59 weeks; diastolic, for 143 weeks.

Patients who received oral hydrogenated alkaloids had a significant blood pressure decrease, but those who swallowed placebos showed no reaction, even though the pills were given three times a day.

"An injection has much more effect on body functions than pills," conclude Drs. Raymond Grenfell, A. H. Briggs and W. C. Holland.

SIMPLE TEST DETECTS INFANTS' RESPONSES

Holding a newborn infant at arms length, rotating him slowly and watching his eye movements makes a quick delivery room or nursery test for checking certain neurological responses of the eye.

Drs. Richmond S. Paine and Murray E. Pendleton of Harvard Medical School described the technique after clinical observations confirmed by electro-oculographic studies.

Dr. Paine explained that all the doctor has to do is hold the baby facing him in a vertical position, with the head inclined forward at an angle of about 30 degrees.

Then the doctor rotates his body and that of the infant in a circle. The baby's eyes will react to stimuli from the semicircular canals and, if normal, appear to turn in the direction in which the motion is progressing. When the rotation is stopped, the eyes will appear momentarily to look back.

In addition to the horizontal deviation of the eyes, the normal infant, if awake, will also exhibit nystagmus.

Lack of deviation may indicate several things, Drs. Paine and Pendleton said. One of these is damage to the semicircular canals or the vestibular nerves, as from streptomycin.

The Boston doctors warned that depressed responses (deviation without nystagmus) can be due to several causes: general central nervous depression associated with such factors as heavy anesthesia, anoxic birth or marked hyperbilirubinemia.

MANY MEXICAN RESTAURANTS TERMED 'TURISTA' TRAPS

Among tourists in Mexico, diarrhea is so common that the natives call it "turista." Now Dr. A. Caballero Servin of Mexico's Department of Health has revealed a reason.

To a wincing audience of physicians attending the National Bacteriological Congress in Mexico City, Dr. Servin reported that 85 per cent of the local restaurants operate in highly unhygienic conditions. In fact, he told his suddenly anorectic listeners, every restaurant in the city, including those listed as "deluxe" and "first class," is guilty of lax sanitation.

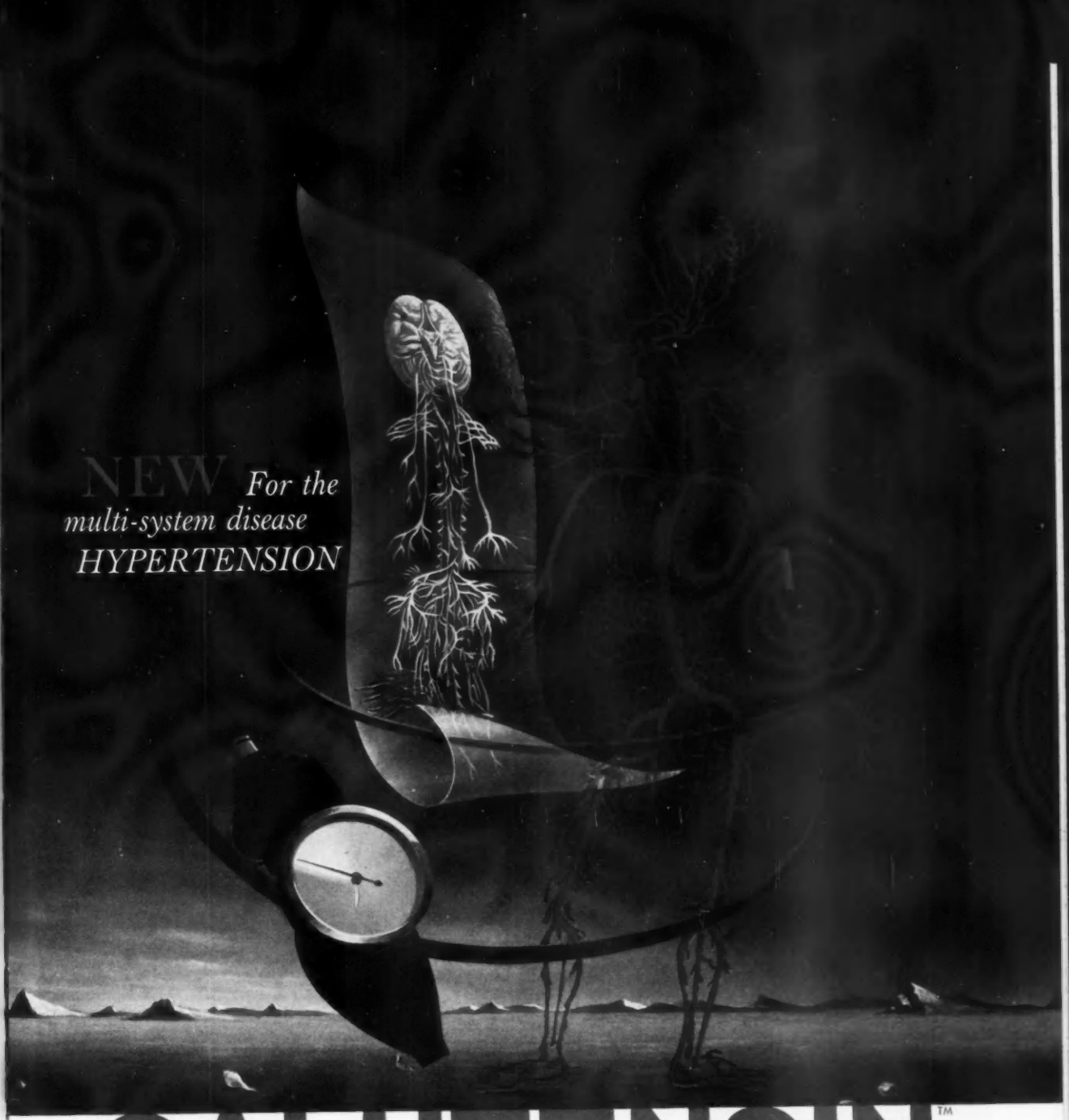
Unannounced spot checks of the city's restaurants have shown plates, cups, glasses, tableware and personnel highly contaminated with organisms that cause "grave and at times mortal intoxication." He added grimly that margarine, cold meats, milk and cream—among other foods—are also germ ridden.

At that, visitors who contract "turista" may be getting off lightly. Mexican cheeses, Dr. Servin said, are infested with Staphylococcus aureus (commonly known in Mexico as the "gilded killer"). And typhoid bacilli are commoner than tortillas.

WINE SPEEDS FAT ABSORPTION IN GASTRECTOMY PATIENTS

St. Paul's admonition to "use a little wine for the stomach's sake" has received clinical confirmation.

In subtotal gastrectomy patients, dry white wine more than doubles fat absorption, according to Drs. T. L. Althausen, Kahn Uyeyama and Muriel Loran of the U.C. Medical Center in San Francisco. Following a glass of wine, they found the rate of absorption of vitamin A increased by an average of 125 per cent in 27 gastrectomy patients. Vitamin A absorption rate, they note, is a well-established measure of fat absorption.



SALUTENSIN™

Hydroflumethiazide • Reserpine • Protoveratrine A

An integrated multi-therapeutic antihypertensive, that combines in balanced proportions three clinically proven antihypertensives.

In each SALUTENSIN Tablet:

Saluron® (hydroflumethiazide)— a saluretic-antihypertensive	50 mg.
Reserpine—a tranquilizing drug with peripheral vasorelaxant effects	0.125 mg.
Protoveratrine A—a centrally mediated vasorelaxant	0.2 mg.

Comprehensive information on dosage and precautions in official package circular or available on request.

BRISTOL LABORATORIES • Syracuse, New York

MEDICAL WORLD NEWS

EDITOR
Morris Fishbein, M.D.

EDITORIAL ADVISORY BOARD
Harold S. Diehl, M.D.
Frank L. Horsfall, Jr., M.D.
Chester S. Keefer, M.D.
Howard A. Rusk, M.D.
Theodore R. Van Dellen, M.D.

EXECUTIVE EDITOR
William H. White

ARTICLES: Mae Rudolph
NEWS: Alex Gordon

ASSOCIATE EDITORS: Robert Claiborne, Alexander Dorozynski, Herbert Kirshenbaum, Jean Watson, George Willard.

COPY DESK: Edwin K. Zittell, *Chief;* Joan Hughes.

CONTRIBUTING EDITORS: Ritchie Calder, Wallace Croatman, Leonard Engel, John Foster, Jacqueline Seaver.

CORRESPONDENTS: *Ann Arbor,* William Bender, Jr.; *Atlanta,* Edwina Davis; *Boston,* Jane McCammon; *Buffalo,* Mildred Spencer; *Chicago,* Theodore Berland; *Detroit,* Jean Pearson; *Ft. Worth,* Blair Justice; *Los Angeles,* Willard Wilks; *Milwaukee,* James C. Spaulding; *New Orleans,* John Wilds; *Oklahoma City,* Imogene Patrick; *Omaha,* Marcia Mickelsen; *Pittsburgh,* Albert Bloom; *Philadelphia,* Pierre Fraley; *San Francisco,* George Dusheck; *St. Louis,* Patricia Page; *Seattle,* Hill Williams; *Toledo,* Ray Bruner; *Mexico City,* Emil Zubryn; *London,* Neil Herzog; *Rome,* John Carter; *Stockholm,* Per Bergstrom; *Toronto,* David Spurgeon; *Tokyo,* Norman Sklarewitz.

EDITORIAL RESEARCH: Benita Steinweg.

EDITORIAL ASSISTANTS: Linda Lang, Carole Pomerantz, Loretta Ponzini, Dorothy Quaranta.

ART DIRECTOR
Christopher Magalos

PRODUCTION
William J. Marsik

ASST. TO EXECUTIVE EDITOR
Reba Berlin

SALES DIRECTOR
William J. Egan, Jr.

EASTERN REPRESENTATIVE
Peter H. Lewis

BUSINESS MANAGER
Anthony P. Battiato

PUBLISHER
Maxwell M. Geffen

A LETTER FROM THE PUBLISHER

As a part-time resident of Connecticut, I've been watching Gov. Abraham Ribicoff's career from the sidelines ever since he first entered Congress in 1949. I'm convinced, on the basis of his record of public service, that the new Secretary of Health, Education and Welfare will be an enlightened and understanding friend of the medical profession.

The men and women who have served in this capacity in the past have been fairly remote from the working doctor. None of them has been as well-known to the profession as, say, the Surgeon General. That is not likely to be true in the future, for Governor Ribicoff is a man who attracts attention by getting things done. You will hear a lot from—and about—him. And I hope he gets to know a lot about you, because you hold the key to the future of medicine in this country.

I trust, therefore, that you will avail yourself of these pages to tell him how you feel about the vital public medical issues which face the American people and the medical profession. And we will open these pages to Governor Ribicoff as a sounding board and barometer for the exchange of ideas between official Washington and the nation's physicians.

Beginning with this issue, we'll start to fill you in on Governor Ribicoff's background and training, on what he has accomplished already and what he will seek in the future. On page 50 of this issue is an article on the new HEW Secretary which appeared in *The New York Times,* written by Dr. Howard Rusk, a member of MWN's Editorial Advisory Board.

* * *

Near the top of the list of problems which Governor Ribicoff faces will be the relationship between Government, the pharmaceutical industry and the public. In two leading articles in this issue, we discuss this relationship from many angles. The Kefauver drug hearings (p. 22) are reviewed and analyzed by two of the men most deeply concerned with them, Sen. Estes Kefauver and Dr. Austin Smith, President of the Pharmaceutical Manufacturers Association. The views they express, as well as our review of the year's activities on the medical front (p. 31), should prove of interest both to our readers and to the forthcoming Secretary of Health, Education and Welfare.

M M Geffen

Publisher

lowers blood pressure drains excess water calms apprehension

Created especially for those patients whose emotional condition complicates the treatment of hypertension and congestive failure

Now for the first time, the most widely prescribed diuretic-antihypertensive, hydrochlorothiazide, is combined with the most widely prescribed tranquilizer, meprobamate. Called "Miluretic," it constitutes new, effective therapy for hypertension and congestive failure—*especially when emotional factors complicate treatment.*

What does Miluretic do? Both components are of proven value in the management of hypertension. And in congestive failure, Miluretic induces smooth, continuous diuresis. Miluretic's biggest advantage is that it tranquilizes hypertensive and edematous patients safely and quickly—*a boon to the physician whose patients' emotional reaction to their condition complicates therapy.*

Avoids side effects of other antihypertensive agents

Antihypertensive agents derived from Rauwolfia often cause reactions such as depression and nasal congestion; Miluretic does not.

Miluretic is a highly effective, safe combination that gives the physician new convenience in the treatment of hypertension and congestive failure—at a lower price to the patient than if the drugs were administered separately.

new Miluretic

MILTOWN + HYDROCHLOROTHIAZIDE

Available at all pharmacies

Composition: 200 mg. Miltown (meprobamate, Wallace) + 25 mg. hydrochlorothiazide

Dosage: For hypertension, 1 tablet four times a day. For congestive failure, 2 tablets four times a day.

Supplied: Bottles of 50 white, scored tablets

C

Jan

OUTLOOK

- **Congressman to push for national medical school**
- **Life expectancy figures soar to all-time high**

Watch dials that glow in the dark will be safer after next month. Under a new Atomic Energy Commission ruling, watchmakers will be allowed to replace radium with radioactive tritium, which the AEC says gives off no gamma rays and emits beta rays so weak they can't penetrate the watch crystal or the outer layer of skin.

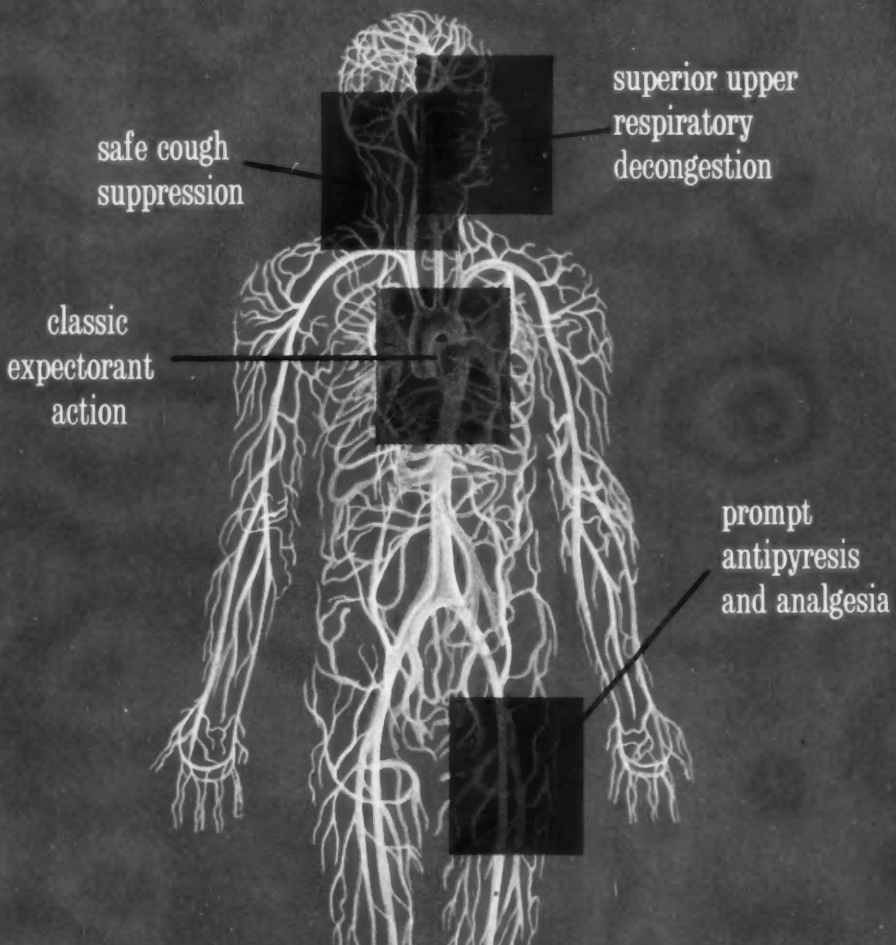
A national medical school, patterned after West Point and Annapolis, will be proposed at the next session of Congress by Rep. F. Edward Hebert (D-La.) of New Orleans. MD graduates would serve for a given period—probably five years—in the Armed Services or the Public Health Service. Rep. Hebert's bill also proposes Washington, D. C., as the site, so that the school can function in connection with the Walter Reed Medical Center, the Bethesda (Md.) Naval Hospital and the National Institutes of Health. With such a school, says Rep. Hebert, the peacetime MD draft could be stopped.

A "blind prediction" study of the occurrence of heart attacks among healthy men is being made in Texas and California. Four thousand men between 39 and 59 years old are undergoing three sets of tests (blood clotting time, blood cholesterol and personality traits). Results of the tests will be parceled out to three research groups which will attempt—without any other information—to predict which men will have heart attacks within five years. The predictions will be locked up until the end of the five years, then evaluated by an independent committee.

An infant born in this country today can expect to live half-again as long as one born at the turn of the century, the Health Information Foundation estimates. Present life expectancy—the highest ever recorded — is 69.7 years, compared to 47.3 in 1900. Females, HIF notes, have benefited most from the increase. Men have gained 20.1 years, women 24.4 years. Their respective average life-spans now: 66.4 years and 72.7 years.

A practical way of sharing information on foreign research picked up by American scientists traveling abroad will be sought under a special project planned by the American Institute of Biological Sciences. This will be one of many problems in biological sciences communications to be examined under a $151,200 program.

for relief from the total cold syndrome...



Tussagesic*

timed-release tablets/suspension

Each Tussagesic timed-release Tablet provides:

TRIAMINIC®	50 mg.
DORMETHAN (brand of dextromethorphan HBr)	30 mg.
TERPIN HYDRATE	180 mg.
APAP (acetaminophen)	325 mg.

Dosage: *Adults and children over 12* – one tablet in the morning, midafternoon and at bedtime. Each tablet should be swallowed whole to preserve the timed-release action.

Each tsp. (5 ml.) of Tussagesic Suspension provides:

TRIAMINIC®	25 mg.
DORMETHAN (brand of dextromethorphan HBr)	15 mg.
TERPIN HYDRATE	90 mg.
APAP (acetaminophen)	120 mg.

Tussagesic Suspension is especially suited for children and for adults who prefer liquid medication; it is pleasantly flavored, non-narcotic and non-alcoholic.

Dosage (to be taken every 3 or 4 hours): *Adults and children over 12* – 1 or 2 tsp.; *Children 6 to 12* – 1 tsp.; *Children 1 to 6* – ½ tsp.; *Children under 1* – ¼ tsp.

* TRADEMARK

DORSEY LABORATORIES • a division of The Wander Company • Lincoln, Nebraska

MEDICAL WORLD NEWS
January 6, 1961 Vol. 2, No. 1

66 EXPERTS TAKE STAND ON BIRTH CONTROL

A majority of the country's professors of obstetrics and gynecology ask the U.S. Supreme Court to end Connecticut's restrictive birth control law

"It would be ironic if the freedom to conquer new frontiers in medicine were jealously guarded while the duty of physicians to give the public benefits of such professional conquests were to be subject to legislative whims. Professions which are to be bold and which are to observe maximum public responsibility must be as free as possible to obey professional conscience and should not be merely put in the same category as the butcher, the baker and the candlestick maker."

With these strong words, 66 professors of obstetrics and gynecology from the nation's top medical schools are calling upon the U.S. Supreme Court to strike down an 81-year-old Connecticut law which levies fines and jail sentences against doctors who recommend "any drug, medicinal article or instrument" to prevent conception.

The medical leaders, MEDICAL WORLD NEWS has learned, branded the law unconstitutional, a violation of the 14th Amendment, because it would "interfere in a crucial manner with the doctor's right to practice," and "prevent him from saving the lives and preserving the health of his patients."

The 66 specialists, all heads of departments in their respective medical schools and some of them past presidents of their specialty societies, are making their pleas *amici curiae* in an historic medical-legal case to be heard by the high court next month.

The case involves Dr. C. Lee Buxton of Yale, and two of his patients (Mrs. "Jane Doe" and Mrs. "Pauline Poe") who charge that the Connecticut laws violate their constitutional rights to prescribe — and to use— contraceptives in the interest of preserving life and health. Connecticut's Attorney General insists the law is proper and that a state has "great latitude" and "direct responsibility over the morals and welfare of its people."

The 66 obstetricians and gynecologists upholding Dr. Buxton's position include such medical leaders as Drs. Nicholson J. Eastman of Johns Hopkins, Duncan E. Reid of Harvard and the department head from one Catholic school, Dr. Roland Cron of Marquette University School of Medicine.

The Connecticut Attorney General is strongly protesting admission of the 66 as *amici curiae* on grounds that the state law does not affect them as nonresidents, and they were not "injured" by the act. But the specialists argue that they *do* have a right to intervene in the case. As obstetricians and gynecologists, they have "a profound concern with, and seek to establish the right of physicians to fulfill their professional and moral obligations to their patients by employing every means known to medical science and approved by the medical community."

Experts' Arguments Spelled Out

In their brief, filed by Whitney North Seymour, president of the American Bar Association, the 66 make four basic arguments in opposing the Connecticut law:

- The right to engage in a profession, free from arbitrary restraints, is protected by the 14th Amendment.
- The right of a physician to treat patients in a medically approved manner is an essential element of his right to engage in his profession.
- A state cannot interfere with the practice of medicine by prohibiting a certain mode of treatment unless the prescribed treatment is medically unsupportable or dubious.
- The advisability and necessity of the prohibited techniques in this case are free from doubt.

In defending the right of doctors to treat patients in a "medically approved manner," the specialists cite the ancient vow of Hippocrates who wrote: ". . . the regimen I adopt shall be for the benefit of my patients according to my ability and judgment." They cite the AMA code of ethics which warns a doctor against relying on an "exclusive dogma or a sectarian system because 'sects are implacable despots; to accept their thralldom is to take away all liberty from one's action and thought.' "

"That the Connecticut statutes may immunize doctors in that state from malpractice suits based on their failure to recommend prohibited techniques is of no moment. They do not and cannot immunize a doctor from the demoralizing realization that he is required by law to fail to live up to the standards of his profession and to neglect the welfare of his patients."

The 66 cite earlier Supreme Court decisions to support their contention that the state can interfere in the practice of medicine *only* where a therapy is medically indefensible or equivocal. In the celebrated Lambert v. Yellowley case of 1926, for example, the high court ruled that the National Prohibition Act could limit the quantity of liquor doctors could prescribe because the medical profession had not proclaimed liquor a proper treatment.

"This court," declare the specialists, "has sustained only those regulations which, in effect, allow the regulating body to choose among competing medical theories. In such cases a physician cannot be said to be inexorably constrained by professional duty

CONTINUED

to follow the course with which the state seeks to interfere.

"But, where professional opinion leaves no such choice and the legislative body unreasonably forbids full discharge of professional obligation, the legislation interferes inadmissably not only with the right to practice a profession but with the concomitant right to communicate to patients the opinion and advice of the physician."

As for the necessity of the techniques advised in the case of Dr. Buxton and his patients, the specialists say there is full professional support for Dr. Buxton's medical position.

Dr. Buxton had concluded that contraceptives were indicated to prevent further pregnancies in the case of Mrs. "Jane Doe," who was suffering from hypertension, partial paralysis, residual kidney damage, speech impairment and emotional instability following a toxemic pregnancy and stillbirth complicated by a cerebral hemorrhage. He felt similar therapy was indicated in the case of Mrs. "Pauline Poe" who had three consecutive pregnancies terminating in the delivery of infants with multiple congenital abnormalities, all of whom died within a few days or weeks. ■

66 AMICI CURIAE FROM 65 MEDICAL SCHOOLS

Alabama W. Nicholson Jones, *Medical College of Alabama;* **Arkansas** Willis E. Brown, *U. of Arkansas;* **California** E. Edson Nichols, *College of Medical Evangelists,* Charles E. McLennan, *Stanford U.,* D. G. Morton, *U. of California, Los Angeles,* Ernest W. Page, *U. of California, San Francisco;* **Colorado** E. Stewart Taylor, *U. of Colorado;* **Florida** Harry Prystowsky, *U. of Florida, James* H. Ferguson, *U. of Miami;* **Georgia** John B. Cross, *Emory U.,* Charles Iverson Bryans, Jr., *Medical College of Georgia;* **Kansas** Kermit Krantz, *U. of Kansas;* **Kentucky** Douglas M. Haynes, *U. of Louisville;* **Illinois** A. E. Kanter, *Chicago Medical School,* George H. Gardner, *Northwestern U.,* M. E. Davis, *U. of Chicago;* **Indiana** Carl P. Huber, *Indiana U.;* **Iowa** William C. Keettel, *State U. of Iowa;* **Maryland** Nicholson J. Eastman, Richard W. TeLinde, *Johns Hopkins U.,* Arthur L. Haskins, *U. of Maryland;* **Massachusetts** Langdon Parsons, *Boston U.,* Duncan E. Reid, *Harvard Medical School;* **Michigan** Charles S. Stevenson, *Wayne State U.;* **Minnesota** J. L. McKelvey, *U. of Minnesota;* **Mississippi** Michael Newton, *U. of Mississippi;* **Missouri** Willard Allen, *Washington U.;* **Nebraska** R. G. Holly, *U. of Nebraska;* **New Hampshire** John S. Lyle, *Dartmouth Medical School;* **New York** Robert E. L. Nesbitt, Jr., *Albany Medical College of Union U.,* Seymour L. Romney, *Albert Einstein College of Medicine of Yeshiva U.,* Howard C. Taylor, *Columbia U. College of Physicians & Surgeons,* R. Gordon Douglas, *Cornell U.,* Martin L. Stone, *New York Medical College,* Gordon W. Douglas, *New York U.,* Louis M. Hellman, *State U. of New York, Downstate Medical Center,* Edward C. Hughes, *State U. of New York, Upstate Medical Center,* Clyde L. Randall, *U. of Buffalo,* Curtis J. Lund, *U. of Rochester;* **North Carolina** Frank R. Lock, *Bowman Gray School of Medicine of Wake Forest College,* Bayard Carter, *Duke U.,* R. A. Ross, *U. of North Carolina;* **North Dakota** Ralph E. Leigh, *U. of North Dakota;* **Ohio** John Ullery, *Ohio State U.,* Stanley T. Garber, *U. of Cincinnati,* Allan C. Barnes, *Western Reserve U.;* **Oregon** Ralph C. Benson, *U. of Oregon;* **Pennsylvania** N. F. Paxson, *Hahnemann Medical College,* T. L. Montgomery, *Jefferson Medical College of Philadelphia,* J. Robert Willson, *Temple U.,* Franklin L. Payne, *U. of Pennsylvania,* Robert A. Kimbrough, Jr., *U. of Pennsylvania Postgraduate School of Medicine,* Milton McCall, *U. of Pittsburgh,* Mary DeWitt Pettit, *Woman's Medical College of Pennsylvania;* **South Carolina** L. L. Hester, *Medical College of South Carolina;* **Tennessee** Philip C. Schreier, *U. of Tennessee,* Frank E. Whitacre, *Vanderbilt U.;* **Texas** Seward H. Wills, *Baylor U.,* William J. McGanity, *U. of Texas Medical Branch, Galveston,* Jack Pritchard, *U. of Texas Southwestern Medical School, Dallas;* **Utah** Irwin H. Kaiser, *U. of Utah;* **Vermont** John Van Sicklen Maeck, *U. of Vermont;* **Virginia** W. N. Thornton, Jr., *U. of Virginia;* **Washington, D. C.** Robert H. Barter, *George Washington U.;* **Wisconsin** Roland Cron, *Marquette U.,* Ben Peckham, *U. of Wisconsin.*

CONNECTICUT FIGHTS CHANGING THE LAW

If there are two or more ways to prevent conception, then the state has every right to make the choice "and there is no obligation that the most modern or scientific remedy be chosen."

So argues the State of Connecticut in urging the U.S. Supreme Court to uphold its law banning artificial contraceptives. It insists that the law is completely within its police powers.

Dr. C. Lee Buxton, who has called for invalidation of the statute, charges that it violates the 14th Amendment in depriving him of a "valuable property right." He says he was deprived because he could not use the "best scientific methods" for his patients.

In its brief, Connecticut counters that the high court has maintained in Lambert v. Yellowley that "there is no right to practice medicine which is not subordinate to the police power of the states. The fact that this policy (against contraception) may deprive some physician of fees because he does not agree with the statute . . . does not thereby mean that said physician is deprived of liberty or property without due process of law."

The 14th Amendment, according to the State's brief, "does not mean that individuals have the right to total liberty for that would mean license and chaos and tend to develop an irresponsible citizenry." The only issue, it adds, is the extent to which the state may exercise restraints.

"When moral and welfare issues are involved, a state has great latitude. Thus, since marriage so affects the morals and civilization of a people, its control and regulation is a matter of domestic concern within each state."

In the controversial area of birth control where "social thinking is divergent," the State had a right to act, Connecticut maintains, adding: If artificial contraception were essential to maternal health, as Dr. Buxton has claimed, the State might be expected to have a high maternal mortality since it banned the practice. Actually, however, Connecticut has one of the lowest rates in the U.S.

"In view of these statistics it is our claim that maternal mortality in Connecticut is fast approaching an irreducible minimum and that there is no urgent medical need for married women to resort to artificial contraceptives for the purpose of preventing conception for health reasons."

All in all, the State is arguing that its own Supreme Court of Errors has upheld the anti-contraceptive law three times on the grounds that it is both constitutional and well within the State's police powers.

"The police power, as exercised by the State," declares the Connecticut brief, "does not deprive either the rights to life and liberty of the appellants or any property rights without due process of law." ■

HOT RADIUM SHIELDED FOR THROAT IMPLANTS

Catheter technique cuts risk to doctor and makes radiotherapy as available as surgery for cancers of the neck and mouth

"I was the most frustrated man in the operating room.

"Working against time, we had to thread the raw radium needles with unshielded hands. Each needle had to be implanted and then sutured to the skin or mucosal surface. When it was time to remove them, we had to reverse the procedure—our hands still unprotected.

"If the tumors were hard to reach, the needles were either too short, too long or too fragile. The whole procedure was sometimes clumsy and always hazardous. Some of us now have radiation burns, others have lost fingers. Admittedly, we were not adept."

Until recently, this was what the radiologist faced when implanting radium in cancers of the mouth, throat and neck, recounts Dr. Joseph E. Scallon, of the Los Angeles County Harbor General Hospital, Torrance, Calif. Understandably, no radiologist did more than a few large cases a month.

This has been radically changed. An "after-loading" technique, perfected by Dr. Scallon and used in 75 patients for two and a half years, gives the radiologist time, safety and accuracy. Dr. Scallon believes that it not only will allow implantation in more cases, but may even replace radical surgery as routine treatment for some of these cancers.

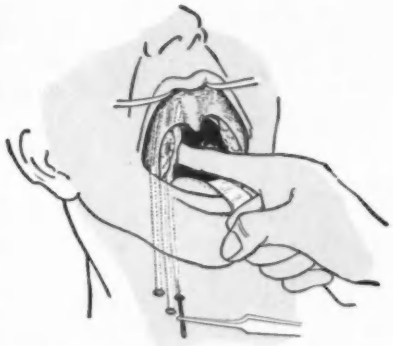
With the new method, the radiologist makes a small stab wound through the skin or mucosal surface and slips in a polyethylene catheter. The radium needles, which now can be handled with forceps, are pushed through the tubing and into the tumor area. At no time does the radiologist touch the "hot" needles.

This offers two major advantages, Dr. Scallon told the annual meeting of the Radiological Society of North America in Cincinnati. Exposure has been cut to one tenth of the former level, and the operator, with much more time available, can accurately place the radium needles.

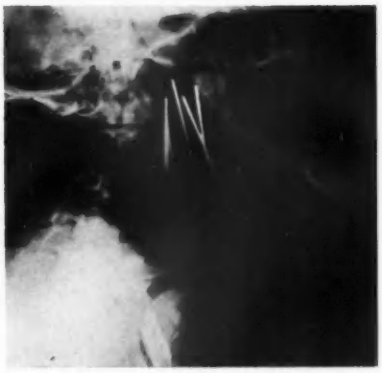
Furthermore, "we are now able to implant areas which before were extremely difficult or inaccessible," particularly carcinoma of the posterior third of the tongue, or of the tonsils.

Cancer of the tonsils, for instance, could be reached only through the mouth and was difficult to treat when raw needles had to be handled. Since the catheters can be made as long as necessary, Dr. Scallon no longer goes through the oral cavity. He implants catheters through the anterior angle of the neck, directs them upward through the parapharyngeal space and into the tonsillar fossa (see drawing). Then he "after-loads" the needles.

Radium therapy for metastatic carcinoma of the neck, now used only occasionally, may also become routine, he believes. The original implanting technique for metastatic carcinoma of the neck causes overexposure to the radiologist as well as the patient. Long needles were necessary in order to extend from the skin—where they were sutured—to the affected lymph glands. This caused normal skin to desquamate, according to Dr. Scallon. With



NEEDLES of radium are threaded through catheter (above) and checked by x-ray.



after-loading, "we obtain only a slight reddening of skin, no desquamation."

Nor is it any longer necessary to suture any needles. Instead, a second,

CONTINUED

FASTER RENOGRAM REVEALS RENAL HYPERTENSION

Selection of patients with hypertension due specifically to renal artery disease can be done in only half an hour, according to Dr. Joseph E. Whitley, instructor in radiology, Bowman Gray School of Medicine, Winston-Salem, North Carolina.

He and his co-workers have modified a technique which involves injecting a radioactive bolus intravenously, placing scintillation counters over the left and right renal arteries and kidneys and making a renogram. This records the rate of radioactivity, and thus the blood flow, through these organs. The method, however, gives "both false positives and negatives in a significant number of cases," he told the Radiological Society of North America in Cincinnati.

By merely speeding up the renogram, thereby stretching out that part of it representing radioactivity through the renal arteries, the renogram curves can be seen in more minute detail. Two different types of curves result. Twenty control subjects and 76 hypertensive patients without renal disease had similar renograms. This indicated that the flow through the renal arteries was similar in both groups.

However, four other hypertensive patients had significantly lower renogram curves, indicating obstruction to flow in the left, right or both renal arteries. Surgery repaired the defect in these patients; they now have normal renograms and are normotensive.

Dr. Whitley points out that the modification of the classic renogram "affords a new approach to the estimation of renal blood flow and the detection of renal vascular disease." Hypertension associated with it, the North Carolina radiologist concludes, is curable because it is local.

RADIOLOGY CONTINUED

narrower catheter is used as a filler, and the end sealed with a hot cauterizing blade. Then the entire implant is sewn to the skin or mucosa.

One further dividend of the method is noted by the California radiologist. In the past year he has begun using iridium ^{192} for after-loading. Since iridium is fixed in slender nylon tubing, it can be cut to desired lengths and implanted through very small catheters, which lessens trauma to the tissues. More than one strand can be loaded into each catheter, and the iridium thread can be used several times—which decreases cost to the patient.

Another use of radium needle implants—in therapy of early anal cancer—has produced "excellent curative results" in five of six cases, according to Dr. T. A. Watson, head of the Saskatoon Cancer Clinic, Canada.

Treatment of Choice

Like Dr. Scallon, he believes that radiation treatment is preferable to radical surgery, and challenges the "widespread impression" that radiotherapy "has little or no place" in the management of anal cancers. On the contrary, he told the Society, "in many cases radiotherapy is the treatment of choice, and permanent cure follows frequently."

The six patients had early cancer lesions of the anal margin or anal canal, ranging in size from 5.0 x 4.5 cm down to 1.3 x 1.0 cm. The radium needles remained implanted for three to seven days.

In only one patient, who was 84 years old, did the treatment fail. "All the others had comfortable and normally functioning ani," the Canadian physician said.

A long-term follow-up study showed that three of the patients still have a normal anus eight to ten years after treatment. A fourth developed a local recurrence in the ninth post-treatment year, "and had a successful abdomino-perineal resection performed." The fifth died of a coronary occlusion four years and ten months later, but there was "no evidence of residual, recurrent or metastatic tumor at death."

Concluded Dr. Watson: "A plea is made for consideration of radiation treatment in preference to mutilating radical surgical operations which necessitate colostomy." ■

SEROTONIN POSES NEW PU

An eight-year study of the role of neurohumors in connective tissue disease turns up a promising new therapy. It also reveals some perplexing biochemical inconsistencies

The door to better understanding of a disease is often opened by the discovery of a treatment that works. A Cleveland Clinic Foundation team headed by Dr. Arthur Scherbel may be performing this synergistic trick with rheumatoid arthritis and other connective tissue diseases.

They have tried out—with some good results—a new kind of therapy, and have suggested a possible relationship between the central nervous system, serotonin and disorders of the connective tissue.

A chance observation eight years ago first put them on the trail. When rheumatoid arthritis patients were given the anti-depressant iproniazid, they showed improvement in several of the central nervous system manifestations which accompany this disease—including loss of energy, mental depression, excessive sweating and increased hypersensitivity to cold and pain. With larger doses of iproniazid, the Cleveland group noticed, joint swelling and tenderness also diminished.

Belief Strengthened

Dr. Scherbel had long thought that a biochemical defect, possibly connected with neurohumoral activity, might be involved in these symptoms. A discovery at the National Institutes of Health strengthened his belief. Investigators there found that iproniazid raises brain levels of the neurohumor, serotonin. Putting the two findings together, he theorized that a deficiency of serotonin in the affected tissue might be related to the inflammation.

"We decided that we ought to investigate the role of serotonin itself," Dr. Scherbel told a symposium on connective tissue disease organized by Philadelphia's Hahnemann Hospital.

He began by injecting serotonin locally in rheumatoid arthritis patients, expecting a reduction of inflammation. They showed none. Instead, small intradermal doses produced pain, swelling and cyanosis, much like secondary Raynaud's phenomenon.

Dr. Scherbel and his colleagues turned back to the laboratory and discovered that a similar hypersensitive reaction to serotonin occurred in animals—but not when they were also given one of two major serotonin antagonists, *Sansert* (Sandoz) and *Periactin* (Merck).

When patients were given intra-articular injections of these drugs, they felt "almost instantaneous" relief of pain. Swelling and inflammation also decreased, although more slowly.

The group then embarked on a two-year clinical study in which the drugs, which are not yet available commercially, were administered orally to 125 patients with a variety of connective tissue disturbances. Among their preliminary findings:

- In 85 cases of rheumatoid arthritis, increased joint motion and reduced pain occurred within one to three weeks in more than 70 per cent of patients. Some cases were severe; most had previously shown inconsistent responses to salicylates, corticosteroids, gold salts or anti-malarial drugs.
- In 10 cases of scleroderma, marked improvement "occurred slowly but consistently, characterized by softening of the skin and loosening of subcutaneous tissue. In patients with calcinosis and draining sinuses, the calcium deposits became smaller and si-

DR. SCHERBEL discovered a paradox.

nuses healed. Ischemic ulcers of the fingers usually healed rapidly."

▸ In 12 cases of systemic lupus erythematosus, serotonin antagonists produced "significant" relief of joint swelling and inflammation, and increased appetite. However, "it is too soon to speak of long-term benefits."

The Cleveland team found that juvenile rheumatoid arthritics usually respond well to serotonin antagonists alone. Adults, however, often require minimal doses of corticosteroids.

Not unexpectedly, the anti-serotonin drugs also produce central nervous system disturbances, including depression and listlessness. However, iproniazid and other serotonin-releasing drugs control these side effects.

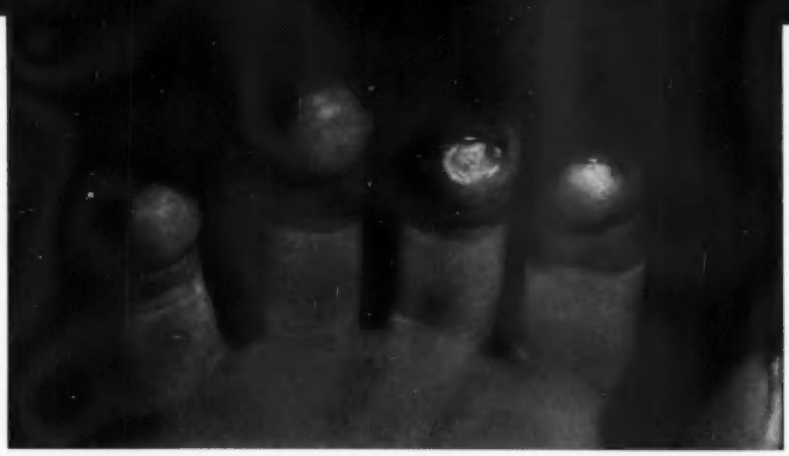
A Paradox and a Schism

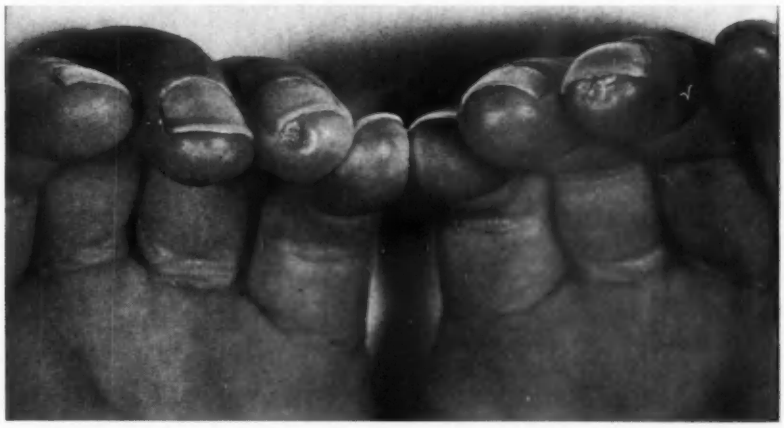
As the Cleveland workers have expanded their clinical studies, they have been struck by the physiological inconsistencies of two apparently antagonistic sets of drugs: iproniazid, which releases amines, and the serotonin antagonists, which inhibit them. Dr. Scherbel believes the paradox may depend on a schism between the central and peripheral effects of the two classes of drugs.

The amine releasers act centrally but not peripherally (at least in the early stages of therapy). The amine blockers act peripherally but not centrally; in fact, they sometimes aggravate central symptoms.

Thus, it may be that in connective tissue diseases the left hand doesn't like what the right hand is doing. Certain amines or related substances which are needed by one system of the body may act adversely in another system of the body because the disease has "knocked out" its protective mechanism against the amines.

Although all these findings have strengthened Dr. Scherbel's belief that a neurohumoral disturbance in the brain is an important aspect of connective tissue disease, he cannot state flatly that the neurohumor is serotonin. It may be some other "biochemical abnormality which is alleviated by reducing amine activity in CNS." Neurohumoral dysfunction, he points out, may only be one of the many defects which occur. ■





ISCHEMIC ULCER, which resisted three months of conventional therapy, (above) heals almost completely (below) after four weeks' administration of serotonin antagonist.

EPINEPHRINE IMPLICATED IN AORTIC ATHEROMA

Another possible link between the nervous system and connective tissue disturbance—this time in the arterial wall—has emerged from animal experiments in Denmark.

Dr. Ib Lorenzen of the University of Copenhagen has produced lesions in the connective tissue of rabbit and dog arteries by daily injections of epinephrine coupled with special diets. The injuries were biochemically and histologically similar to those of human atherosclerosis.

Reporting on the study, Dr. Gustav Asboe-Hansen of the University said this indicates that a chronic oversupply of epinephrine, due to psychic wear and tear, may be intimately related to cardiovascular diseases, particularly in such groups as doctors or executives.

In the Danish study, the experimental animals were injected intravenously with 0.005 mg epinephrine daily for two months. They developed thickening and edema of the aortic media and intima. This was followed by calcification and necrosis. Subsequent microscopic examination revealed "moderate proliferation" of fibroblasts and fragmentation of the elastic membranes.

Although the Danish investigator sees a direct connection between the injections and the lesions, he notes that atheroma does not follow the lesion unless the animals are kept on a high fat diet. The injuries, he speculates, are probably due to the repeated anoxia created when the vasa vasorum are constricted by epinephrine.

Commenting on Dr. Arthur Scherbel's studies implicating serotonin in connective tissue disease (see above), Dr. Hansen says some of his own experiments seem to confirm the Cleveland findings. For example, he has injected serotonin intraperitoneally in hamsters. Mast cells in the animals' cheek pouches then released mucopolysaccharides, which is "the very first thing that happens in connective tissue fibrosis."

WHAT THE SENATE DRUG HE

The two leading spokesmen assess the 12-month legislativ inqui

By Sen. ESTES KEFAUVER
CHAIRMAN, Senate Antitrust and Monopoly Subcommittee

- **Doctors should be aware of product prices when they are prescribing.**
- **All new drugs should undergo objective testing by an independent group before they are allowed to go on the market.**
- **Physicians should be told of hazards as well as the advantages of products.**

One informed observer has remarked that the drug hearings conducted by the Subcommittee constitute the first "well-documented record of what goes on in the business of discovering, producing and distributing drugs."

This is important to the doctor because of the strategic role he plays in the marketing of ethical drugs. Here, unlike any of the previous industries examined by the Subcommittee, the person who places the orders for products is not the person who pays for them. In a very real sense, the patient is captive. Unlike the purchaser of a refrigerator or a television set, he cannot shop around or exercise any prerogatives of choice.

This situation is inescapable in a doctor-patient relationship involving the use of potent drugs; and, indeed, I am not suggesting that it should be otherwise. But it also places very heavy responsibilities upon the physician who holds such an important position with respect to both the drug industry and the patient. How can the drug hearings aid him in an efficient conduct of this role? What are the trouble spots that he should know about? I think the hearings have highlighted six crucial points of which the doctor should be aware.

1. Many of the drug companies tend to exaggerate the merits and minimize the possible hazards of new drugs. This is particularly the case if the physician relies on direct mailing or medical journal ads rather than a careful reading of package inserts.

The Federal Trade Commission and the Food and Drug Administration have the responsibility for ensuring that drug labeling and advertising are free of false and misleading statements. But up to the present, neither agency has been active in policing such matters with respect to prescription drugs.

The FDA has the responsibility for ensuring the safety of new drugs. In general, that agency has done an adequate screening job as far as acute toxicity is concerned; however, it cannot be safely assumed, without careful study of all the reference material and all the fine print in the package insert on the drug, that an adequate job of clinical screening has been done for chronic toxicity.

Nor can detail men be regarded as wholly reliable sources for information on new drugs.

Drugs—perhaps above all other products—lend themselves to the practice of overassertions and exaggerations of therapeutic claims for competing products. Among our witnesses were a number of former and current medical directors of the drug manufacturing companies. Several testified that their recommendations with respect to advertising material were either disregarded or overruled.

Loose Claims, Hard Sell Techniques

2. Physicians are subjected to intensive hard-sell campaigns on expensive manipulated molecules of old drugs, and often these new drugs are no better. This sales technique goes under various euphonic names: "keeping the doctor up to date," "medical education," or just "keeping the doctor informed."

A good example is the corticosteroids. According to medical experts, prednisone represents a real advance over the earlier cortisone; but despite the heavy deluge of

CONTINUED ON PAGE 24

UG HEARINGS REVEAL

slati inquiry and reach widely divergent conclusions

By AUSTIN SMITH, M.D.
PRESIDENT, Pharmaceutical Manufacturers Association

- **$500,000 has been spent by probers without constructive results.**
- **Political intrusion into medicine has shaken patient confidence and made the MD's job even more difficult.**
- **Less of the health dollar goes for prescriptions today than in 1930.**

The stenographic transcript of the Senate drug hearings of 1959-60 now exceeds 8,890 pages in 42 volumes which make a pile five feet high. A year of intermittent testimony and questioning have placed in a public record scrutiny of almost every policy and procedure of the pharmaceutical industry.

Though prompted by the alleged high cost of drugs, the hearings have been a remarkable illustration of the high cost of Congressional probes. The price tag includes the better part of a half-million dollars of taxpayers' money spent by the Subcommittee, and the far greater sum (running into the millions) which the defendant drug industry has had to spend.

What, we might ask, has this expenditure of words and dollars accomplished? An examination of the official transcript yields two clear answers:

• Excessive zeal was applied to building a "case" against the prescription drug industry on the grounds of price conspiracy, monopolistic practices and sundry sins.

• The hearings have produced no constructive proposal to make high quality drugs more easily attainable.

This is not to say that the hearings have been devoid of public consequence. On the contrary, sensational charges against the drug houses and scare headlines on the clinical properties of individual drugs may have forever jolted public trust in the caliber of medical care.

For this reason the task of restoring and maintaining public confidence in the quality of medical care takes priority status. This added burden on the time and energies of the medical practitioner can best be discharged if he understands the difference between *publicity* on the drug hearing and what the *facts* in the testimony actually reveal. Let's examine the facts in detail.

The Subcommittee alleged, for example, that markups on cortisone and several derivatives ranged as high as 7000 per cent. Newspapers headlined this charge.

The refutation by drug industry spokesmen in subsequent hearing sessions was not favored with equal space. They pointed repeatedly to the fact that the Subcommittee staff's cost-ratio of basic raw material to a finished product, bottled and in a box on the pharmacist's shelf—was a meaningless yardstick, misleading to the public. The figures took no account of manufacturing costs, research and development, testing and quality control, the expenses of selling and distribution or, for that matter, plant overhead and the wages of employees.

Concurrently, industry spokesmen cited the Government's own figures to show that in ten years of deepening inflation, manufacturers' drug prices had remained more stable than those of other essentials; that the cost of drugs today takes an even lesser percentage of the average person's medical care dollar than it did in 1930; that in many cases drugs today can do the job that yesterday required lengthy hospitalization, long convalescence and a net financial loss or outlay far exceeding the cost of chemotherapy.

To this day the 7000 per cent figure is used in political speeches and editorials as evidence of the drug industry's delinquency. Nor is it generally known that even the chairman of the Subcommittee later conceded that the markup percentages were ill-conceived.

No issue of the drug hearings illustrates more vividly how testimony has run the course from anarchy to reason

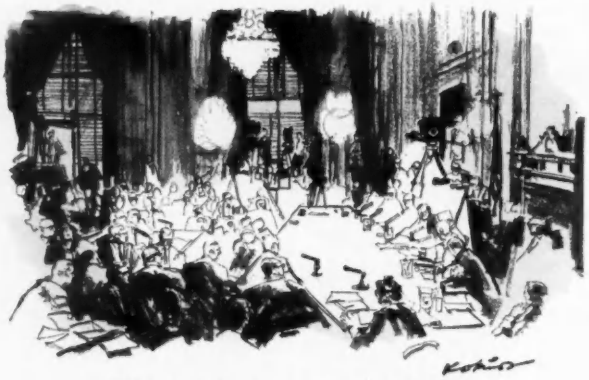
CONTINUED ON PAGE 27

SEN. KEFAUVER CONTINUED

company advertising, this cannot be said of the newer molecular modifications such as 6-methyl prednisolone (*Medrol*), triamcinolone (*Aristocort* and *Kenacort*) and dexamethasone (*Decadron, Gammacorten, Deronil*).

The argument advanced in their favor is that they are more potent and have fewer side effects. But Dr. Russell L. Cecil, famous steroid authority and consulting director of the Arthritis and Rheumatism Foundation, testified that the available evidence suggested little real difference in therapeutic efficacy; he believed that the patient "will have pretty much the same unfortunate side effects with all of them."

3. Costs of advertising and promotion are usually the largest single item in the cost of a prescription drug. One of the greatest hassles during the hearings concerned the presentations showing estimated factory costs for producing certain drugs as contrasted with their prices to druggists. *Miltown,* for example, costs Carter about $.007 a tablet (400 mg) as against a price of $.065 to the druggist. This was confirmed by H. H. Hoyt, president of the company. Similarly, prepared tables showed a manufacturing cost of $.003 per tablet for *Serpasil* (1 mg) as against $.10 to the druggist; for *Meticorten,* $.013 per tablet (5 mg) as against $.17 to the druggist; for *Orinase,* $.013 per tablet (.5 mg) as against $.083 to the druggist; for *Tetrex,* $.05 per tablet (250 mg) as against $.306 to the druggist, and so on.



SRO crowd fills Senate hearing chamber.

The companies raised objections to these tables on the ground that heavy expenditures of advertising and distribution were not included. The point that we were trying to make, of course, was that actual manufacturing costs constitute only a small proportion of the prices charged.

4. Prescriptions by generic name are in most cases less costly to patients than prescriptions by brand name. This was another very controversial issue in the Subcommittee hearings. Officials of the Military Medical Supply Agency of the U.S. Government, probably the largest buyer of drugs in the world, reported that they made most of their purchases on the basis of generic names.

Our hearings disclosed striking examples of drugs being sold under generic names for a fraction of the prices charged for brand names. For example, *Serpasil* sells to the druggist for $39.50 per 1000 tablets (.25 mg), reserpine, the generic name for *Serpasil,* may be purchased by the druggist for as little as $1.60 per 1000.

I was impressed with the defense of the use of the hospital formulary in a *JAMA* editorial for September 3, 1960. After stating that the 1959 drug bill of $530,000 for The New York Hospital would have been roughly doubled without its use of the formulary, the editorial says:

"The formulary system saves this stupendous sum (perhaps $500,000) because: (1) it reduces the pharmacy inventory; (2) it makes possible the purchase of larger lots of drugs than does a non-formulary system; (3) it facilitates the purchase of drugs with non-proprietary names in a competitive market."

Legislation on Literature

However, it seems necessary to me that the inspection work of the Food and Drug Administration be strengthened to insure that all drugs—both of small and large companies—are of high quality. To that end I have introduced legislation in Congress for consideration in the next session.

5. Literature should contain information on drug prices. Several of the physician-witnesses at our hearings were critical of the fact that no information is supplied the medical profession by drug manufacturers with respect to prices charged. As a layman, I confess that this omission came to me as an outright shock. It seems only simple common sense that if the physician is the determinant of the product to be purchased by the patient, he should have price information easily available as one factor to be taken into account when he writes the prescription.

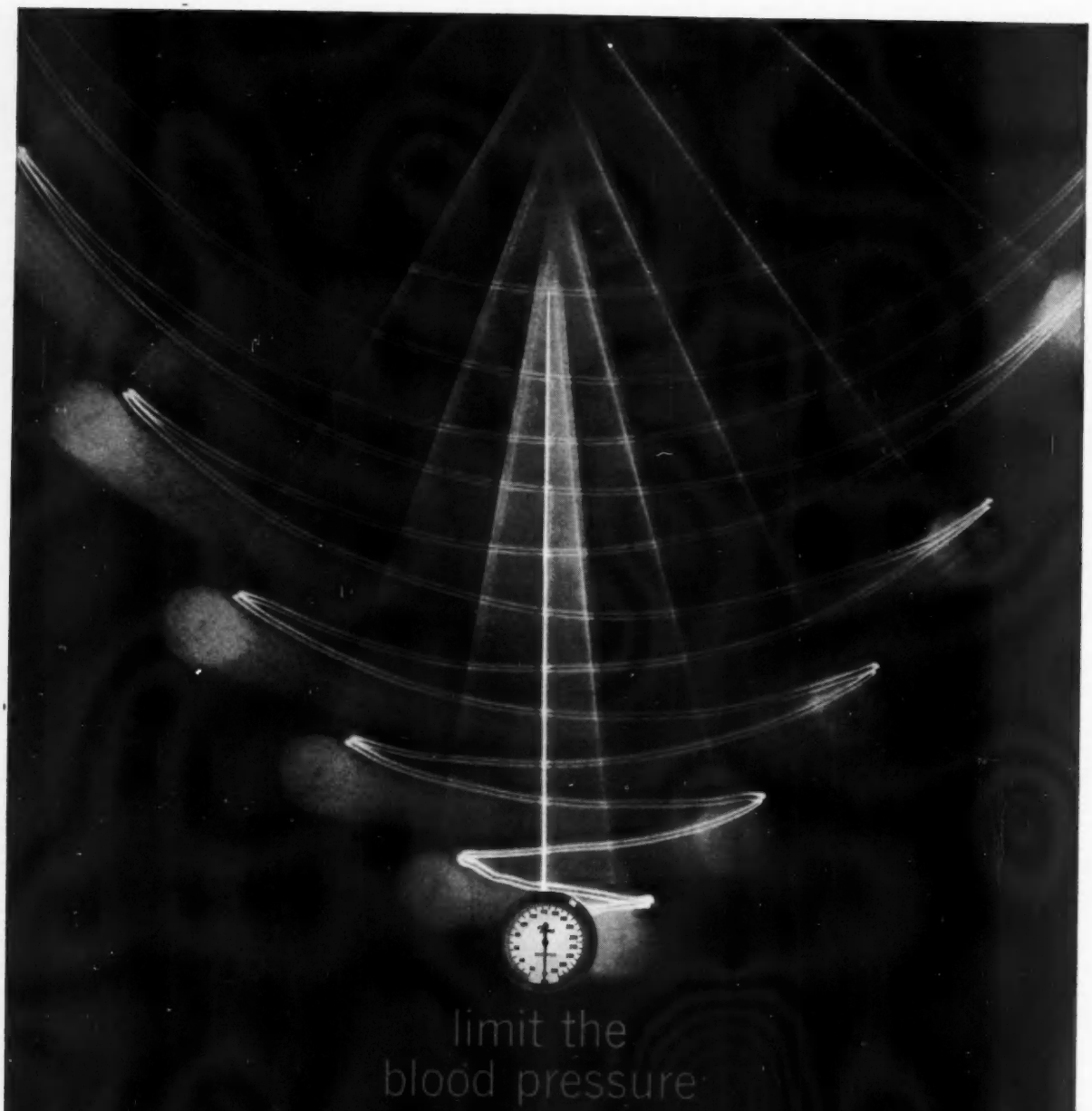
6. There is imperative need for some agency to provide physicians with objective evaluations of new drugs. A number of medical experts appearing before our Subcommittee expressed regret that, in the mid-fifties, the American Medical Association discontinued its program of granting official seals of approval for useful new drugs and stated that while the AMA *New and Nonofficial Drugs* was helpful, there was too great a time-lag between the marketing of the new drug and its evaluation by the Council on Drugs.

Need for Independent Judgment

Dr. Maxwell Finland of Harvard stated that at one time he urged that groups of experts in various fields join with drug manufacturers to work out a plan for independent evaluation and publication of their findings "regardless of what drug manufacturers felt of their evaluation." This proposal, he stated, did not meet with approval from the drug companies.

Dr. Harry F. Dowling of the University of Illinois College of Medicine had a number of useful suggestions. One was that the Food and Drug Administration be given funds to finance testing, where needed, by an independent agency. Such an agency, he stated, would "present an unbiased point of view to the personnel of the Food and Drug Administration, which often hears the point of view of industry alone."

The problems are not easy. But if these hearings serve the function of awakening the interest of the medical profession, of stirring up discussion among its members, of developing ideas and practical suggestions, I shall feel that big steps have been taken in the direction of their solution. ■



Rautrax-N lowers high blood pressure gently, gradually . . . protects against sharp fluctuations in the normal pressure swing. Rautrax-N combines Raudixin, the cornerstone of antihypertensive therapy, with Naturetin, the new, safer diuretic-antihypertensive agent. The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects. The result: Maximum effectiveness, minimal dosage, enhanced safety. Rautrax-N also contains potassium chloride—for added protection against possible potassium depletion during maintenance therapy.

RAUDIXIN,® RAUTRAX,® AND NATURETIN® ARE SQUIBB TRADEMARKS.

Supply: Rautrax-N — capsule-shaped tablets — 50 mg. Raudixin, 4 mg. Naturetin, and 400 mg. potassium chloride. Rautrax-N Modified—capsule-shaped tablets —50 mg. Raudixin, 2 mg. Naturetin, and 400 mg. potassium chloride. For complete information write Squibb, 745 Fifth Avenue, New York 22, N. Y.

new Rautrax-N*

Squibb Standardized Whole Root Rauwolfia Serpentina (Raudixin) and Benzydroflumethiazide (*Naturetin) with Potassium Chloride

Squibb Quality—The Priceless Ingredient

SQUIBB

DR. SMITH CONTINUED

than the celebrated controversy on prescribing by trademark or non-proprietary names.

There was a rash of publicity, capped by a leading national magazine's plea for patients to "pressure their doctors" to use "finer discrimination" in prescribing. Again the result was, and is, an impression among many editors and writers that non-proprietary named drugs are not only cheaper than trademarked drugs but just as good. The later testimony of qualified physicians, pharmacologists and public health officials, which set the problem in true focus, was largely ignored by the press.

Testifying on May 13, the Director of Revision of the United States Pharmacopeia had this to say about generic prescribing as a generalized practice:

"My opinion, sir, is that it is unsafe because there is not sufficient policing at the present time to insure that standards are being met."

Eventually, the Subcommittee's own majority counsel and staff director observed for the record:

"It would seem to be illogical that a doctor would have any fear of prescribing the same thing. But as long as there is any scintilla of evidence . . . that there perhaps may be on the market under generic names drugs of varying quality, certainly the doctor would appear sound in being very cautious about prescribing generically."

Perhaps the most serious by-product of the hearings has resulted from trespassing by politicians in the technical field of drug properties, side effects and toxicity.

The predictable results followed swiftly. In a letter to the Subcommittee, Dr. James Moss, head of the diabetic clinic at Georgetown University, stated, for example, that careless testimony had caused anxiety among diabetic patients. He said that because of one physician's testimony, frightened patients had abandoned treatment altogether.

How Could It Happen in the First Place?

After the initial furor and the immediate consequences arising from the toxicity debate, responsible doctors and pharmacologists began the slow process of rehabilitating public confidence. Repeatedly, they have stressed all the medical arguments that need no repetition here, including the physiological truth that anything, including food, can be toxic if used to excess or by the wrong person.

In surveying what has happened during these months, it only remains to determine how such a thing could have been allowed to happen. The reputation of the ethical drug industry has been compromised. Doctors, and for that matter the entire health establishment, emerge in public opinion as slightly addled dupes of commercial greed. There is evidence that patients have abandoned treatment. And this in a country that has led the world in medical care and pioneered a revolution in health.

The word "revolution" is significant in providing at least part of the answer. For it is a fact that the revolution in health has been really a revolution in the instrumentalities of health—in the health care professions, in the pharmaceutical industry, in hospitals. For doctors, the rapid unfolding of new medical knowledge has encouraged specialization. The population explosion, in no small measure spurred by longer life and better general health, threatens to outstrip the supply of doctors; in turn, it has accelerated the trend among doctors to team up with their colleagues or work round the clock, 365 days a year.

The pharmaceutical industry, following the breakthroughs of the 1930s and 1940s, has been transformed from the quiet purveyor of a few ancient remedies to a major American industry with an important share of responsibility for health. The incredibly fast rate of new drug discovery and development with all its benefits to medicine has created unique problems: How best to communicate with doctors? What new drug leads should be explored? How to guarantee nation-wide inventories, without which drugs are useless to those who need them?

Finally, the American people themselves have undergone a revolution in their medical thinking. So much more is now possible through medicine—so many formerly hopeless or chronic diseases can be cured—that medical care is viewed less and less as a service and more and more as a birthright. Lest there be any doubt, it is only necessary to sample the nation-wide demand for compulsory medical coverage for the aged, which means, of course, the beginning of a compulsory health scheme for others in other age groups.

MERCK President J. T. Connor speaks for industry.

As these revolutionary currents reached the surface, not all professional observers perceived that medical care would reach the proportions of a national debate. But the debate is well under way, and the ethical drug industry's appearance on the Congressional witness stand is neither a beginning nor an end to it.

The facts, however, will show why there is a difference in price between the small package placed on the shelf of a pharmacy and the large order received by a government purchasing agency. The facts will show why foreign markets with far less expensive labor and other costs provide some basic drugs at lower prices. The facts will show how drug prices have been held in check while prices for other goods have risen steadily. The facts will show the drug industry is regulated as much as, if not more than, any other industry in the U.S.A. The facts will show, too, how advertising is supervised by others than those who prepare it, this supervision being by physicians who control the contents of medical journals. The facts will show how little difference in price there often is between reliable products bearing trade names and reliable products bearing only generic names. And the facts will show the dangers inherent in the use of unreliable products made available on the basis of a price advantage and not with careful laboratory control. ■

tool of research

RATTAIL HEAT TECHNIC

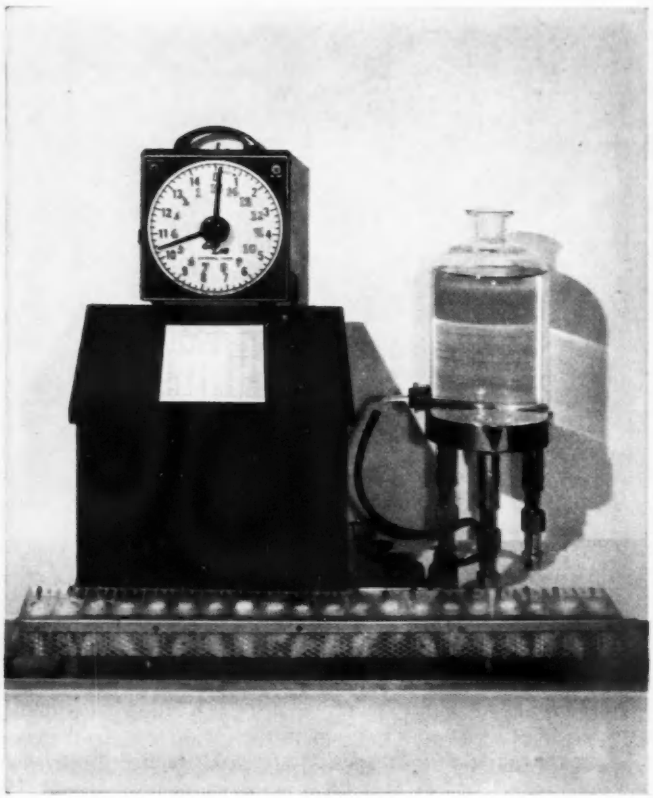
Twenty rats, in groups of four, are used in this modification of the method described by Davies *et al.*[1] The pain stimulus is provided by a heated resistance wire placed near the rats' tails. Direct contact with the hot wire is prevented by a specially designed water-cooled tail rest. Observers record the time interval that animals take to respond (tail jerk) to the heat stimulus.

Untreated rats react within three to six seconds. Any prolongation of this reaction time in animals receiving test medication is an indication of analgesia.

The rattail heat technic is one of many tests used by Lilly scientists to study the analgesic properties of compounds such as Darvon®.

1. Davies, O. L., Raventos, J., and Walpole, A. L.: Brit. J. Pharmacol., 1:255, 1946.

Darvon® (dextro propoxyphene hydrochloride, Lilly)



Rattail Heat Technic . . . valuable in preliminary screening of drugs for analgesic activity.

■ relief
from pain,
fever, and
inflammation

DARVON® COMPOUND and DARVON COMPOUND-65

Both products combine the analgesic advantages of Darvon with the antipyretic and anti-inflammatory benefits of A.S.A.® Compound. Darvon Compound-65 contains *twice* as much Darvon as regular Darvon Compound without increase in the salicylate content or size of the Pulvule.

Formulas:

Darvon Compound		Darvon Compound-65
32 mg.	Darvon	65 mg.
162 mg.	Acetophenetidin	162 mg.
227 mg.	A.S.A.®	227 mg.
32.4 mg.	Caffeine	32.4 mg.

Usual Dosage:

Darvon Compound: 1 or 2 Pulvules three or four times daily.

Darvon Compound-65: 1 Pulvule three or four times daily.

Darvon® Compound (dextro propoxyphene and acetylsalicylic acid compound, Lilly)
A.S.A.® Compound (acetylsalicylic acid, acetophenetidin, and caffeine, Lilly)
A.S.A.® (acetylsalicylic acid, Lilly)

120222

MEDICAL HIGHLIGHTS OF 1960

UPSET by conservative Congress, neither candidate got what he wanted.

Politics made the biggest impact on the MD but clinical advances and basic research quietly changed his practice

Although more men, money and materials were committed to medical research in 1960 than ever before, it proved to be a year in which the physician's practice was most deeply influenced by developments in politics and the area of public policy. What came out of the laboratories had less impact than what happened at the hustings and the polls, in legislative chambers and hearing rooms.

The line between politics and public policy was often blurred, which was a boon to some politicians.

The balance-conscious Eisenhower budget proposed to keep appropriations for the National Institutes of Health, which constitute the world's biggest single research fund, at $400 million for the fiscal year ending next June. But in an election year, the vote-catching appeal of slogans such as "speeding up a cure for cancer" was irresistible. Sen. Lister Hill (D-Ala.) got a committee together with several big names on its roster to back a bigger budget. It proposed $664 million. The compromise was $560 million.

The political component was clearer in the donnybrook that developed over aid for medical care for the aged. But it, too, was compounded of elements of conscience and policy. Rhode Island Democrat Rep. Aime J. Forand's proposal was to make comprehensive care for millions of aged a Federal responsibility, financed by a boost in Social Security taxes. Neither house of Congress and neither major party would endorse such a far-out extension of the New Deal.

The AMA spearheaded opposition to all Forand-type devices and had the backing of all organized medicine and an evident majority of physicians. It insisted on two traditional principles: state control of 50 separate systems, and limitation of aid to the "medically indigent," locally defined. As passed, under the sponsorship of Rep. Wilbur Mills (D-Ark.), the legislation covers 2.4 million needy aged already receiving public assistance, and authorizes special programs for others, medically indigent but not on relief. If fully implemented it would cost the Federal Government about $200 million a year, the states $140 million.

Defeat of all Forand-type measures was proof of the AMA's power, but it may prove to have been a Pyrrhic victory. By giving so little, the Mills plan invited attack during the campaign. Even Vice-President Nixon called it "a most inadequate answer." His counter proposal, while preserving states' rights, was for a greatly enlarged program to cover 11 million aged, with emphasis on preventive care. Estimated cost: $600 million in Federal funds, $600 million from the states.

President-elect Kennedy plumped for the Social Security approach, and he still has medical aid for the aged high on the list of "key measures" to be pressed early in the new Congress. Whether he will moderate his sweeping campaign proposals in light of his hair-breadth victory is not yet clear. But Kennedy will have no rubber-stamp Congress. The issues of how much medical aid to give the aged, and how to provide it, will be debated for months to come.

In Congress' special session, plans to give Federal aid for medical school buildings (as distinct from operations) were lost. So was the Keogh bill, which would have given physicians and other professional men an income tax advantage on retirement income funds. Despite these setbacks, organized medicine blocked a proposal to put physicians under Social Security. Though the bill passed the House, it was beaten in the more sensitive and responsive Senate.

POLICIES AND PRINCIPLES

The recruitment of foreign-trained physicians to fill internships and residencies in U. S. hospitals became a matter of international concern. In "the last" qualifying exams given by the Educational Council for Foreign Medical Graduates, 2,000 candidates, who were already in the U. S., failed. Many faced the choice of going home "voluntarily" or being deported, until the State Department realized that these physicians would be ambassadors of ill-will and "could present us

CONTINUED

SABIN, COX polio vaccines were assayed by United States Public Health Service.

HIGHLIGHTS CONTINUED

with an embarrassing foreign-policy problem."

So the failures were granted one more crack at the tests, on April 4. Meanwhile, they may not treat patients, and most will serve as lab technicians. The April failures must be out of the country by July 1.

The new deadline can mean only postponement of the "embarrassing problem" of foreign grads already in the U. S. But the problem cannot recur: Henceforth, applicants must pass the exams before they leave home.

Conflict of Interest

Another U. S. agency was embarrassed when it developed that Dr. Henry N. Welch, head of the FDA's antibiotics division, had received large sums in editorial fees and royalties from MD Publications, Inc. No criminal acts were charged, but since Welch had much to do with the licensing of antibiotics whose manufacturers' reprint orders paid him royalties, the conflict of interest was clear. Welch had to resign, and FDA tightened its rules governing outside activities of its employees.

In sensational hearings, Senator Estes Kefauver and his Subcommittee counsel "threw the book" at the U. S. ethical drug industry. In a shaky start the industry got a bad press, but later defended itself ably. As a side effect of the hearings, the volume of direct promotional mail may be reduced. And the quality of promotion will be improved. The companies' medical directors will have what amounts to a veto on advertising claims. And to head off proposed legislation to give the FDA sweeping powers over drug promotion, companies that have been lax will probably raise their standards to match those of leaders in the field.

Controversy also flared over prescribing by brand name vs generic name. In the Kefauver hearings it was claimed that patients would get huge savings if prescribing doctors used generic names of drugs. Opponents of this suggestion say the Senator's argument ignored the fact that many of the most widely-prescribed drugs now are produced by one company, or two or three, so price spreads are negligible or non-existent. It also, they say, ignores the finer points of drug quality: the nature of excipients, solubility, absorbability, particle size and that most important of intangibles—the quality control on which a prescribing physician bases his confidence in various manufacturers' products.

IN PRACTICE

Immunization against viral diseases preoccupied public authorities, manufacturers of biologicals and many practitioners. February saw a massive test in Dade County (Miami and environs) of Dr. Herald R. Cox's oral live-virus polio vaccine, made by Lederle Laboratories. No paralytic disease directly attributable to the vaccine was reported after 413,336 inoculations, and Dade County had less polio than usual. But the U. S. Public Health Service's Poliovirus Advisory Committee weighed the evidence on the risks of the attenuated viruses' reverting to virulent form, and the evidence of contamination with simian viruses (from kidney tissue cultures) of unknown pathogenicity. It then approved only the oral vaccine developed by Dr. Albert Sabin at the University of Cincinnati, overriding the claims of the Cox vaccine and of one developed by Dr. Hilary Koprowski at the Wistar Institute. The Sabin vaccine, which has been given to scores of millions in the Soviet Union, has had relatively little testing in the U. S. Sabin's work has been supported by The National Foundation.

Though several manufacturers (including Lederle) prepared to produce the Sabin vaccine, it now appears that none will pass PHS safety testing until after the 1961 polio season has ended. In the meantime, all authorities have renewed their pleas for fullest possible use of Salk vaccine. An improved form, *Purivax,* developed by Dr. Maurice Hilleman for Merck Sharp & Dohme, was said to give as much protection with two inoculations as three shots of earlier preparations.

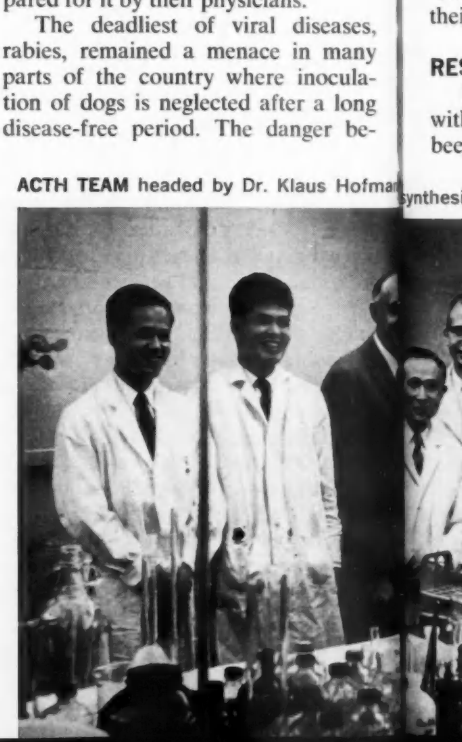
This would be of some help in reducing the growing number of inoculations needed in childhood. In 1960, the American Academy of Pediatrics prescribed 13 to 18 shots in the child's first 16 years—for diphtheria, pertussis, tetanus, polio and smallpox.

Measles Vaccine Coming

Heartening evidence was accumulating that a live-virus vaccine against measles, based on the work of Harvard's Dr. John F. Enders, would soon be ready for manufacture. The vaccine apparently protected all previously non-immune children during an explosive epidemic in a New York City institution. Tests are continuing. Delay in acceptance of this vaccine was more likely to result from parental overcaution than from any lack of safety in the product. It usually causes a slight fever, sometimes with a mild, transient rash. Mothers could be alarmed by this if not adequately prepared for it by their physicians.

The deadliest of viral diseases, rabies, remained a menace in many parts of the country where inoculation of dogs is neglected after a long disease-free period. The danger be-

ACTH TEAM headed by Dr. Klaus Hofma



came heightened by the spread of the virus to many species of bats. These animals, if healthy, rarely attack man. Thus, any physician with a patient bitten by a bat was urged to assume that the bat was probably rabid.

The alleged overuse, or even outright abuse, of antibiotics continued to produce serious side effects, and the nature of infections prevalent in hospitals continued changing, with an increasing proportion of organisms resistant to penicillin and tetracyclines. Dr. Maxwell Finland of Boston renewed his criticism of haphazard "prophylactic" penicillin shots for patients with minor ailments— usually viral infections for which the anti-bacterial drug is useless. He admitted, however, that much of the fault lies with patients who expect or demand such treatment. Dr. Finland's prescription: Physicians should drop such patients—"It would be to the glory of the profession."

After several disappointments following over-optimistic announcements of greatly improved penicillins, one was licensed which so far has lived up to its early hopes: 2,6 dimethoxyphenyl penicillin (*Staphcillin*, Bristol). A semi-synthetic, resulting from isolation of the penicillanic acid base, it is relatively so immune to degradation by penicillinase that it remains effective against many of the most stubbornly penicillin-resistant strains of Staphylococcus aureus. Many cautious "show-me" clinicians have made it their choice against "hot staph."

RESEARCH

Efforts to combine chemotherapy with other anti-cancer measures have been generally disappointing, but Dr. George E. Moore of Buffalo reported encouraging preliminary results from a multi-center study in breast cancer. With three injections of *THIO-TEPA* (Lederle) given during, and shortly after, radical mastectomy, survival rates were markedly increased in premenopausal women, doubled in postmenopausal. So far, only half the five years needed to judge survivals has elapsed.

Proof that human leukemia is of viral origin was claimed by Dr. Steven O. Schwartz of Chicago, who said he had "more than fulfilled" Koch's postulates. Besides recovering the agent after it had induced disease in mice, he prepared an antiserum by injecting it into prisoner volunteers; this immunized mice against the original virus.

Aldosterone and ACTH

An apparent contradiction between the known potency of aldosterone as a hypertensive agent and inability to connect it with the fulminating form of the disease was explained by Columbia University's Dr. John Laragh. Hypersecretion of aldosterone is indeed involved, he showed by radioisotope tests, and is probably causal. Current studies will show whether it can be combated with spiralactones or by reducing adrenal activity.

The complex ACTH molecule, of 39 amino acids, began to yield its secrets to chemists. Dr. Choh Hao Li of California synthesized a 19-acid fraction with one-third the biological activity of the original; Dr. Klaus Hofmann of Pittsburgh got it up to 23. These achievements stirred investigators and clinicians and roused new interest in ACTH, which was more or less pushed aside by cortisone. But the ability to examine ACTH's chemical structure may lead to understanding of how it works, and to manipulation of its structure into other useful compounds. It might even be possible to pluck out the single effective component from the undesirable ones.

Dr. Wendell Stanley's California team cracked the 158 amino-acid code in the protein coat of the tobacco mosaic virus: 16 acids in 12 sections, now all identified. It is the first virus to be so analyzed, and raises hope that the feat can be duplicated in the more complex viruses which cause cancer in mammals—and perhaps, in man.

"Microsurgery," made possible by

CONTINUED

Hofman synthesized "business end" of hormone.

Hard filled capsules in bottles of 30.

4 mg.

Medrol* Medules†

pH-patterned slow release...

not here at pH 1.2

In the relatively acid medium of the fasting stomach, Medules are kept essentially intact by their special pH-sensitive coating (about 5% of Medrol content released in 2 hours at pH 1.2).

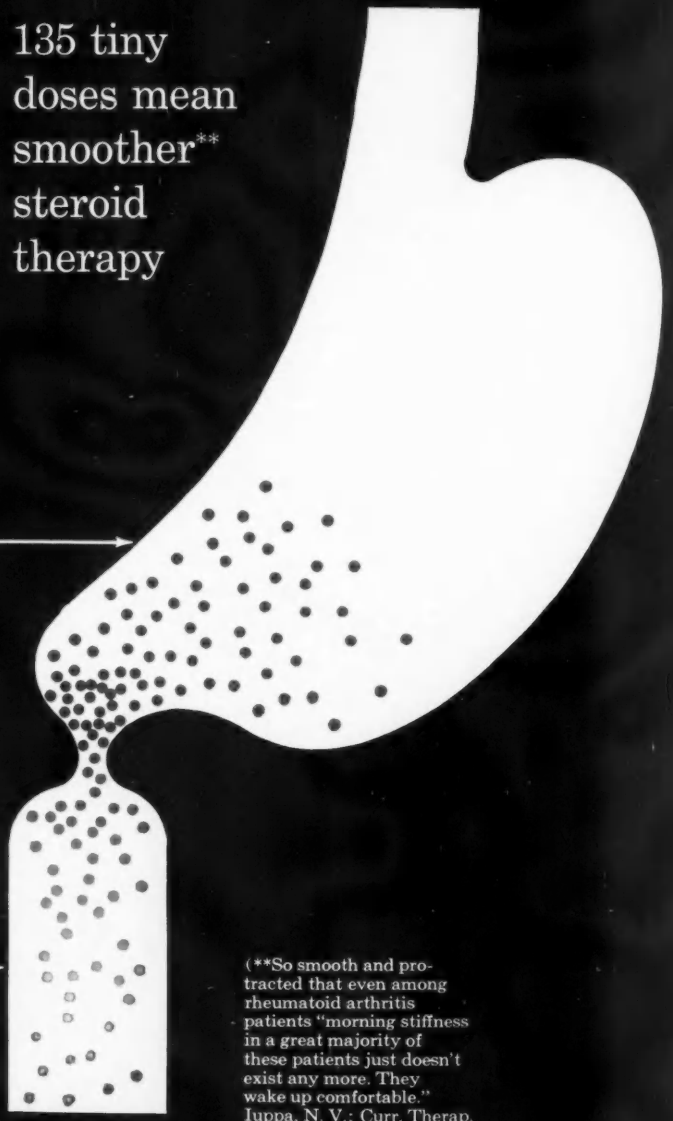
but here at pH 7.5

In the environment of the duodenum (at pH of approximately 7.5) 90% to 100% of the Medrol content is released within 4 hours.

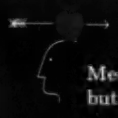
...means gradual steroid absorption

Upjohn The Upjohn Company Kalamazoo, Michigan

135 tiny doses mean smoother** steroid therapy



(**So smooth and protracted that even among rheumatoid arthritis patients "morning stiffness in a great majority of these patients just doesn't exist any more. They wake up comfortable." Iuppa, N. V.: Curr. Therap. Res. 2:177 (June) 1960.)



Medrol hits the disease, but spares the patient

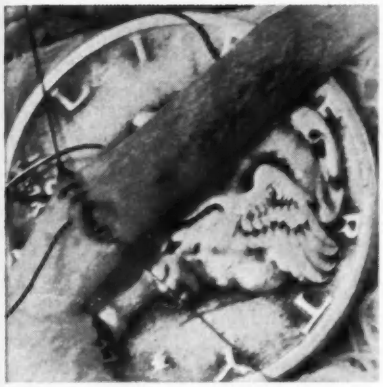
*Trademark, Reg. U. S. Pat. Off.—methylprednisolone, Upjohn

†Trademark

HIGHLIGHTS CONTINUED

use of a dissecting microscope during vascular operations, won favorable attention because it permits anastomosis of vessels down to 3 mm diameter.

A massive, long-term double blind study at 24 British research centers went far to end an old debate based on conflicting clinical impressions: Gold salts have definite value (and are even superior to other therapies) in many cases of rheumatoid arthritis.



MICROSURGERY under dissecting microscope anastomosed 3 mm vessels.

Another thorough British study contradicted earlier alarming reports of an association between prepartum diagnostic x-rays and childhood leukemia—in 39,166 cases, no increased risk appeared.

AND MANY OTHER ITEMS

A Houston, Texas, radiologist used standard office equipment to diagnose soft-tissue tumors and found that he could achieve 99 per cent accuracy in 2,000 cases. With reduction of voltage and use of a special fine grain film, the technique may become the best method of diagnosing breast tumors, some radiologists feel.

Widespread use of triparanol (*MER/29*, Merrell) was reported effective in lowering blood cholesterol levels. Whether this would give any protection to men threatened with coronary occlusions was not yet clear. Efforts to achieve the same effect by diet were encouraged by scientific committees of the American Heart Association. And another approach to simple weight reduction—Mead Johnson's *Metrecal* and its rivals—aroused public interest and made headlines on the financial pages.

In the first suit by a lung cancer victim's widow ever to reach a jury, a Federal court in Miami held that the decedent's chain smoking had been the cause of his cancer and his death, but, it said, the American Tobacco Co. was not liable for damages because it could not have known, until it was too late for this consumer, that its products might be carcinogenic. In New Orleans, a similar suit brought under Louisiana's strict law of implied warranty, was dismissed for essentially the same reason.

Merger of the Blues

Blue Cross plans have been failing to increase their enrollment at the same rate as competing (including commercial) insurance. The Blue Cross Commission (an arm of the American Hospital Association) merged with the Blue Cross Association to improve servicing of nationwide contracts with subscriber transfers. Dr. Basil MacLean, former Association head, urged the plans to cover diagnostic services and acute mental illness. If voluntary, non-profit plans failed, he said, the only alternative would be Government insurance.

The wisdom of unselectively screening all available chemicals, ordered by Congress and administered by the Cancer Chemotherapy National Service Center, was sharply questioned. The program now costs more than $20 million a year.

Like the politicians, the Nobel Prize winners and the basic researchers, the private men of medicine and its fringes also kept busy during 1960. Retiring at the age of 92, an Elmira, N. Y., physician publicly cancelled all his unpaid bills—which he claimed totalled $50,000. Citizens in the town of Gackle, N. Dak., (population 650) advertised for "an Albert Schweitzer to practice medicine in their town."

And in De Pere, Wisc., cheesemaker Stuart Stebbins came up with a discovery. One day he noticed that cheese was a good smoke absorbent and, being a thinking man, it occurred to him that cheese might make a good cigarette filter. A professor of biochemistry at the University of Wisconsin ran some tests for Mr. Stebbins which showed that cheese, with a little charcoal added, removed 90 per cent of the tars from an ordinary cigarette. Estimates Stebbins: If all filters were made from cheese and charcoal they would consume 500,000,000 pounds of dry cheese a year. ■

FUTURE physicians get anatomy lesson. WHO hopes to train 500 native MDs by 1970.

MEDICAL TEAMS FACE CHAOS IN THE CONGO

The following first-hand dispatch on chaotic medical conditions in the Belgian Congo is by Contributing Editor Ritchie Calder. He was sent to the Congo to make an on-the-scene study for the United Nations and the World Health Organization.

LEOPOLDVILLE

The bitterest reproach heard in the Congo consists of three words spoken by a Belgian nun—"they left us." "They" are the Belgian doctors. The "us" are five nuns and 775 lepers in one of the largest leper colonies in the Congo. The country has 275,000 registered lepers in all.

This colony has neatly laid out cottage units, and its surgical block gleams with the most modern equipment. But the equipment is idle without personnel. In place of an entire medical staff, a Canadian doctor is now the sole physician; all he can do is medicate and feed the lepers as best he can. As a result, active cases of leprosy are wandering back to their villages.

A similar situation exists in remote Bunia, an area of endemic bubonic plague. The minute a death from plague was reported, a mobile public health unit, sent by WHO, rushed to the area. Luckily, the number of cases proved statistically normal for the area and season. But the laboratory in which the vaccine was usually prepared is abandoned. The Europeans responsible for supervision have fled, leaving the Congolese teams, that used to spray fleas and catch rats, without leaders.

A WHO French doctor has to prepare his own vaccine and to publicly inject himself to prove to the natives that it is safe. He has had to reorganize the plague services and educate Congolese for responsibilities for which they had never been trained.

Cannibals and Caterpillars

In one hospital in Kasai, a Norwegian Red Cross doctor introduced me to a Congolese who had just completed a four-day trek through the bush to be treated for a bullet wound in his arm. As we shook hands, Dr. L. K. Buer remarked, "He is from a cannibal tribe, but we have had to change his diet." And he proceeded to administer antibiotics.

In an adjoining ward, a Congolese woman with three small children, and another obviously expected, had helped her wounded husband out of the bush. She brought food for them all, which she quietly unpacked while the doctor was examining her husband. Apart from cassava root, the rations included three dried rats and a handful of squirming hairy caterpillars. Dr. Buer needed the most extreme tact to persuade her to join the other women setting up improvised kitchens outside, and not to light a fire on the ward floor.

Conditions in most of the hospitals are hygienically perilous. This is partly due to the fact that "independence" for the Congolese orderlies and nurses has meant freedom not to go on duty unless they choose, not to take orders, and to leave when they like. But it is also partly due to the fact that European doctors and technicians have "gone on leave."

The result is chaos. In one hospital, for example, the magnificent array of stainless steel sterilizers are useless because of electrical and plumbing breakdown. No Congolese had been trained to repair the machines. So Red Cross doctors have to sterilize instruments in stewpans.

In addition to these problems, doctors sent by WHO have a highly personal interest in toxicology. They frequently run the risk of becoming targets for arrows dipped in poisons concocted by witch doctors. Textbooks give no antidotes for the poisons.

Before independence, there were 761 doctors in government and company service, and in private practice. There were 75 pharmacists, 44 dentists, 11 biologists and 136 *assistants-medicaux*—Congolese with four years of secondary schooling, four years theoretical and two years practical training under a doctor of medicine, and three years internship in a recognized institution.

Forty per cent of the doctors and practically all of the 623 sanitary agents have returned to Belgium. Most of the nurses, mainly nuns, have remained.

Faced with this situation, WHO called on the International Red Cross, the League of Red Cross Societies and governments to supply doctors and nurses to fill the gaps. Of over 1600 who responded to an appeal, 150 from 25 countries were sent to the Congo.

WHO has launched long-term measures. With only two Congolese medical graduates in sight, they arranged to provide professors and instructors to give regular academic medical training to 60 of the elite of the *assistants-medicaux* and to expand the number of new students. Under this program the Congo might be able to train about 500 qualified doctors by 1970—600 short of the number required to maintain one physician per 16,000 population, the proportion existing before the Belgians left the Congo. ■

REFLEX STIMULATION CORRECTS CLUBFOOT

To restore muscle balance and prevent recurrence, infant's foot is periodically stroked as the cast is gradually cut away

One of the oldest and most discouraging problems in treating clubfoot may be licked by an ingenious new technique. It employs the infant's own reflexes for development of normal muscle balance.

Since Hippocrates (whose theory of correction is still basically good) treatment has been aimed at anatomical correction only, say Dr. Maurice B. Furlong and physical therapist George W. Lawn of Woman's Christian Association Hospital, Jamestown, N. Y. This overlooks the key fact: As long as the original muscle imbalance is untouched, recurrence of clubbing is almost inevitable.

Dr. Furlong's new method takes this into account. Basically, it uses the same plaster-cast technique accepted by most orthopedists—but with two all-important variations.

The first is a progressive cutting back of the cast in strategic spots as the anatomical correction proceeds. Felt padding inside the cast leaves "growing room" for the limb; it also allows placement of felt wedges under the sole and behind the heel to maintain each improvement of the foot.

Muscle Is Re-educated

The second innovation is muscle "re-education." Because the very young infant still has the flexion or withdrawal reflex, this reflex can be employed to "exercise" the necessary muscles and restore the balance that will keep the foot straight.

Dr. Furlong turns the reflex stimulation chore over to the nurse, and later to the infant's mother. Twenty or 25 times a day she strokes the plantar surface of the foot with an applicator through the opening in the cast. The cast itself forces the foot to move only in the desired direction of eversion, pronation, abduction and later, dorsiflexion. (Dr. Furlong instructs the mother to do the job after each diaper change; it's convenient and easy to remember.)

Actually, three reflexes are being utilized by this method: flexion or withdrawal; the crossed-extension reflex which involves contraction of extensors on one leg and reciprocal inhibition of the flexors on the other: and the Frankel reflex, a reinforcement of dorsiflexion of the foot by resistance to the flexion of the thigh when the knee is restrained.

Treatment Must Start Early

Treatment is begun when the infant is about a week old. Within two or three weeks the foot is almost completely corrected anatomically, says Dr. Furlong. At this time the cast is opened sufficiently to allow free dorsiflexion, and a thick wedge under the sole of the foot combines with plantar stimulation to counteract the plantar flexion deformity. By the end of the sixth week, motions of the foot are normal, though the range is slightly limited.

A second cast may be needed at the end of the first month, but full functional correction is usually achieved within two months after therapy begins. Splinting and reflex stimulation are required for about four months. After that the child is freed of special shoes and special exercises.

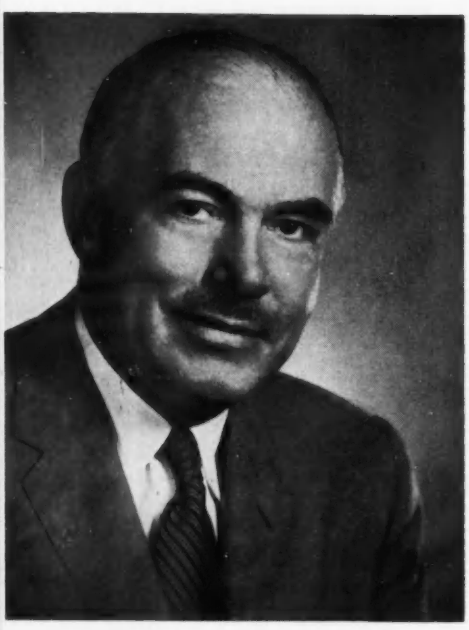
Dr. Furlong recommends that the youngster be kept under observation for several years, but believes "that our method produces a real and permanent cure. . . . In the future, after our method proves itself, recurrence will be very unlikely and will not have to be feared."

Treatment of seven patients has given "excellent results" in all except the first, a patient in whom treatment was started late. In two infants with unilateral clubfoot, "it is difficult to tell which was the affected foot," Dr. Furlong reports.

Speculating on other possibilities, he says the technique might help those infants and small children with weakness of the lower extremities from polio or even cerebral palsy, who are too young to co-operate in physiotherapy. ■

GREENER PASTURES OUT WEST?

Los Angeles medical group finds doctors who seek success on West Coast were often unsuccessful back home



DR. QUINN delivers some tart words.

Keeping tabs on the occasional violator of medical ethics is a perennial problem to county medical societies. Nowhere is the problem greater than in Los Angeles County, where the burgeoning medical association has 8,000 members.

Last week, Dr. William F. Quinn, the immediate past president of the Los Angeles County Medical Association, delivered some tart words on the subject.

"Unhappily," he said, "the doctor who is unsuccessful elsewhere seems to migrate to Los Angeles, and the 'eight-ball' physician here is not just a narrow fringe, but constitutes a fairly broad border. Occasionally we must reassess our viewpoint; the doctor who is extremely successful in Salt Lake City or Peoria or Philadelphia can also migrate to Los Angeles. But frequently, it seems, those who do appear to be motivated by greed.

"Parenthetically, the elderly and, at times, senile physician, because of his age, does not migrate from New York or Ohio to Chicago. He continues on to Los Angeles. Unfortunately, as with senile persons in general, he is the last one to be aware of his senility."

Dr. Quinn and his associates estimate that the problem physician represents up to five per cent of the membership. "But," he adds wryly, "the larceny and philosophy he represents give us 90 per cent of our bad publicity."

Committees Cut Complaints

Special committees in Los Angeles handle about 150 complaints a year and have succeeded in reducing fees in more than 50 per cent of the cases. Many of these complaints simply involve misunderstanding due to incomplete explanation of services rendered, or frail rapport between patient, doctor and insurance company. But the technique used with known offenders is usually blunt. Confronted with this approach, some physicians offer no justification but merely say, "OK, how much do you want us to reduce this bill?"

Says Dr. Quinn: "We hope that committees involved in handling the problem physician have guts enough to do their job even though they could be sued occasionally for their actions." Association bylaws, he explains, do not provide for broad disciplinary powers.

While such policing committees are fairly common, Los Angeles has gone a step further by creating a panel of medical experts who are willing to testify in malpractice cases. Dr. Quinn concedes that "there is a calculated risk here" and that "this philosophy does not necessarily endear us to our colleagues in the local communty.

"We also recognize that some types of plaintiffs' attorneys do not always accept the opinion of the expert if it doesn't coincide with their financial interests. These attorneys will shop around until they find a physician who, for a fee, will testify as the attorney wishes. It is felt, however, that we should stand up and be counted in malpractice cases and let the chips fall where they may."

Those involved in 29 cases of alleged malpractice felt the panel system was of value.

MD Testimony Rarely Needed

The Los Angeles leader points out that in some instances the panelist's report is instrumental in securing a settlement for a substantial amount, and that in other instances it results in a case being declined by an attorney. Doctors of stature are appointed to this panel. They actually have had to testify in only five or six cases because the implied threat of their testimony usually results in out-of-court settlement.

The courts themselves are sponsoring legislation to expand this approach on a trial basis in Los Angeles County, encouraging panels of impartial experts to settle "conspiracies of silence" and the battles of paid experts.

Another watchdog group that Dr. Quinn believes proves its worth is the tissue committee. In ten years of experience at a major hospital, it was found that only three per cent of the staff were involved in 80 per cent of cases in which the justification for surgery was questioned. No suggestion was made that these men resign but "the point was made that par for the course was a certain figure or a certain number of honest mistakes and that they might wish to re-evaluate their philosophy and lower their handicap." Comments Dr. Quinn: "After the first year the statistics changed rather rapidly."

Whether these committees are effective enough to stave off punitive legislation may be tested shortly. The state has formed a committee of its own which is studying the disciplinary situation; it will hold early hearings.

Dr. Quinn has a parting bit of advice regarding formation of special committees by medical societies: "It is wise to have as members general practitioners who are not dependent on referrals from their colleagues." ■

ROPE CLIMBING RATS AID PSYCHOSIS STUDY

Three separate labs confirm a controversial report on serological differences between psychotic patients and normals

Ever since Tulane psychiatrist Robert G. Heath first reported finding a substance in the blood of schizophrenics which produced brief psychosis in normal people, other investigators have tried doggedly to confirm his discovery. Their repeated failures began to raise doubts that such a substance exists.

Now, from three separate laboratories comes new evidence of a human blood factor which may be related to psychotic behavior. Something in the globulin fraction of blood disturbs rats much as do LSD and other drugs used to produce experimental psychosis, reports Dr. Hudson Hoagland of the Worcester (Mass.) Foundation for Experimental Biology.

The effect of the factor was first observed when Drs. C. A. Winter and L. Flataker at the Merck Laboratories in West Point, Pa. injected whole plasma into rats trained to scale a five-foot rope for their dinner. Normally, the rats scampered up the rope in two to three seconds. An injection of normal human plasma slowed them down a little, but an injection of plasma from a schizophrenic, a manic depressive or an involutional psychotic increased climbing time to as much as 40 seconds.

AGILE rat slows down after getting injection of blood factor from a psychotic.

The finding of the Merck team was soon confirmed by Dr. Hoagland and Dr. John R. Bergen, also of the Worcester Foundation, and Drs. Robert B. Pennell and C. A. Saravis of the Protein Foundation, Boston. And what appears to be the same protein fraction has been separated at a third lab —the Lafayette Clinic in Detroit. Drs. Jacques Gottlieb and Charles Frohman are trying to develop a chemical test to diagnose psychosis based on the changes the substance causes in the carbohydrate metabolism of red blood cells. With it, they have already been able to spot a number of known schizophrenics from a random group of plasma samples.

But the basic question, whether the new factor is the substance discovered by Dr. Heath (which he calls taraxein), is not finally solved. There are many similarities, but there is at least one important difference. Dr. Heath has consistently reported finding no activity in the plasma of normal people or non-schizophrenic psychotics. On the other hand, the Worcester, Detroit and Merck groups find the substance to be present in all human plasma samples, though the level in psychotics is higher regardless of diagnostic catagories. None of these groups has yet injected the new substance into normal persons.

According to Dr. Hoagland, efforts are now being made to purify the factor to the point where such tests will be possible. Preparation of purified solutions is complicated by rapid deterioration of the substance. The Massachusetts investigators, however, now have a technique of preserving the fraction's activity for long periods.

"At this point," says Dr. Hoagland, "we can only say that it is highly possible that our active substance is the same as Dr. Heath's taraxein, and that failure of others to confirm Dr. Heath's work has been due chiefly to the instability of this substance." ■

AGED CARE IN SLOW MOTION

Despite AMA prodding, only two states have launched any plan for care of the elderly under Mills-Kerr measure

In line with the old military maxim that "the best defense is a good offense," the AMA has been going all-out to prod states to act swiftly in setting up the new Federal medical care program for needy aged and, thereby, lessen pressure for Forand-style legislation in the new Congress.

Unhappily, the results so far have been anything but encouraging. Nearly three months after passage of the AMA-backed Mills-Kerr Bill, only two states have launched programs. In at least 18 states, no action is presently being contemplated.

The Mills-Kerr law — the moderate, limited legislation which finally emerged from last fall's melee over aged medical care — provides for increased Federal matching funds for states supplying medical care for aged welfare patients. It also establishes a new program to extend medical care to other aged who are not eligible for public assistance but who may need special help to meet medical costs.

The law is what the doctors ordered. As one high AMA official puts it: "There has seldom been a program tailored so exactly to the specifications suggested by organized medicine — local definition and determination of eligibility, local choice of scope of benefits and method of payment and minimal Federal controls."

In a pep talk to medical society leaders during last month's AMA Clinical Meeting in Washington, Dr. Ernest B. Howard, assistant executive vice-president, put the issue bluntly: Organized medicine is facing a full-blown national campaign "to discredit the Mills-Kerr Bill . . . to destroy it . . . and to set the stage for Social Security legislation."

Among other things, Dr. Howard reported, the opposition is making strong headway with criticism that the "means test" is demeaning. This argument, he said, has not been answered satisfactorily either by Vice-President Nixon or by organized medicine. The new needy-based program is also being attacked, he said, as inadequate and unnecessary — unnecessary because not all aged are needy.

Actually, he said, the Bill's approach is right and necessary because some aged do need public assistance but all aged do not have to be corralled into a Federal program. And, he insisted, it is adequate although "obviously time is needed for its implementation."

A major factor in how speedily the states act is what Congress does about a Forand-style bill. Many states, officials frankly conceded, are unwilling to embark on the complicated Mills-Kerr program until they see what the Forand bill outlook is in the new Congressional session.

C. Joseph Stetler, director of the AMA's Legal and Socio-Economic Division, said that all but about 15 state medical societies have been active in efforts to get their states to participate in the program.

Societies Urged to Act

In addition to the wait-and-see mood, financing is a big factor. Despite generous Federal matching formulas, some states would have to raise taxes to finance new medical care programs —and this is politically unpalatable.

In the case of the increased matching funds for welfare patient care, for example, six states (Alaska, Arizona, Georgia, Mississippi, South Dakota and Texas) and the District of Columbia will be ineligible for extra contributions simply because they do not operate vendor medical care programs. States having vendor programs can get up to 80 per cent of the payments from the Federal Government.

Because of the great number of problems to be ironed out by the states before the new program can be put into operation, the AMA House of Delegates in Washington adopted a series of recommendations.

One recommendation urged that under the program of Medical Assistance for the Aged (MAA), any type of treatment or facility that is medically necessary be provided for the needy non-welfare patient. But, it said, aid should be limited to services "beyond the individual's means" rather than "all treatment costs for each case."

The House of Delegates also recommended that eligibility for care be based on an applicant's medical needs and his ability to pay at the time of need "without compromising the resources he needs to retain his self-supporting status when he gets well."

All in all, the AMA is engaged in an urgent effort to make the new Mills-Kerr program an unqualified success. It is pressing state societies to spur agencies and legislatures into action.

For even if only a few states refuse to take part, the Forand forces will be arguing that some Americans are being denied the assistance Congress intended them to have. And, the AMA says, they will undoubtedly be using this as a new club to win passage of a Social Security-type bill. ■

WHAT THE STATES ARE DOING WITH FEDERAL FUNDS FOR THE AGED

PLANS AWAITING HEW APPROVAL—Michigan, West Virginia.
LEGISLATIVE ACTION—Kentucky (enacted), Massachusetts (in process).
PREPARING PROGRAMS—New Mexico, Oklahoma, Arkansas, Louisiana, Maryland, Rhode Island, Virginia, Georgia, Indiana, Tennessee, Utah.
CONSIDERING PLANS—Alabama, Alaska, California, Colorado, Delaware, District of Columbia, Florida, Idaho, Montana, Nebraska, Nevada, New Jersey, North Dakota, Ohio.
LEGISLATION UNDER STUDY—Hawaii, Illinois, North Carolina, Washington.
NO LEGISLATION CONTEMPLATED—Arizona, Connecticut, Iowa, Kansas, Maine, Minnesota, Mississippi, Missouri, New Hampshire, New York, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Vermont, Wisconsin, Wyoming.

HOW MANY OLD PEOPLE REALLY NEED HELP?

A survey suggests that the very sick, 'problem' aged constitute only about 10 to 15 per cent of all those over 65 years old

On the eve of this week's White House Conference on the Aged, the Health Information Foundation has issued a research report that may significantly change thinking about health care for the elderly. There are only two million—not 15 million—"problem" aged in this country, the report implies.

These estimates are derived from a study made by the National Opinion Research Center of the University of Chicago, under an HIF grant. In the spring of 1957, University researchers sought out and interviewed a cross-section (1,734) of the country's non-institutionalized older citizens.

For one thing, says the report, most people over 65 think they're in good health. In spite of self-reports of specific diseases and frequent complaints about the aches and pains they say they've come to expect with advancing years, only a minority of the over-65 population think they are sick. And even fewer think they are very sick.

This very sick minority — the "problem" aged—differs from the rest of the population in several important respects. The most significant difference, perhaps, is the fact that just ten per cent of all persons interviewed fall into this category. If those who were "too sick to be interviewed" are added to this group, the proportion of the very sick in the older population rises to 14 per cent. Thus, on a nation-wide basis, those likely to require physicians' services most frequently number from 1,550,000 to 2,170,000 persons.

The very sick, according to the HIF report, are in a lower income bracket than the rest of the older population. Only 18 per cent of the very sick reported owning any kind of health or hospital insurance. Forty-one per cent of the remainder of the aged population carry such insurance protection.

The very sick differ from the rest of the older population in other respects, too; in their general characteristics and in many of their attitudes toward health and medical care. They are more likely to be women than men; they tend to be at the older end of the 65-plus group.

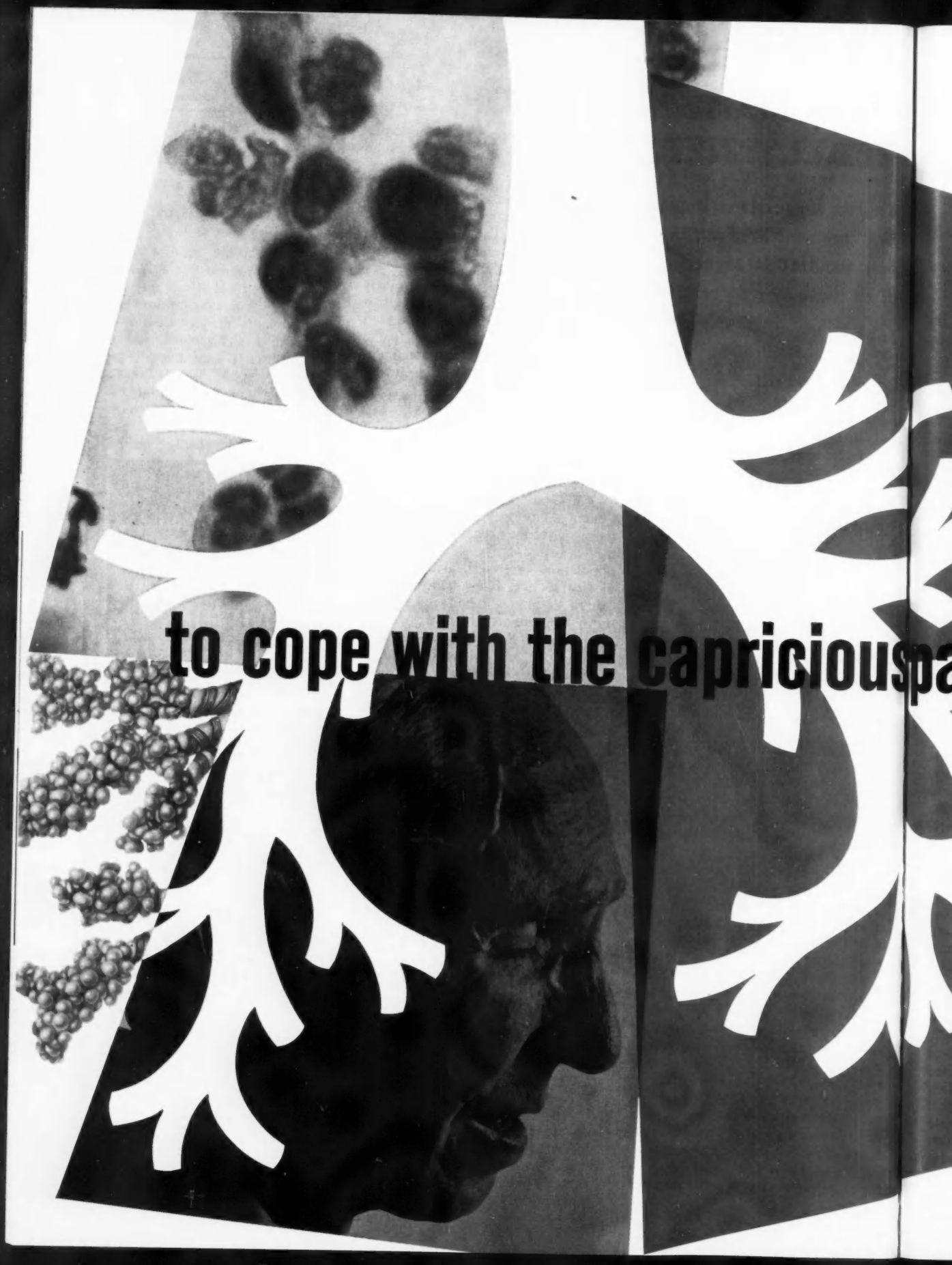
Most of the very sick aged say their health is always poor, and more than half say their own health is worse than that of other people their age. In the other nine-tenths of the older population, only 13 per cent feel their health is poor.

The report notes that the very sick also feel "old." Nearly all of them refer to themselves as "aged," "old" or "elderly." But a third of other aged persons call themselves "middle aged."

The National Opinion Research Center study clearly indicates that those among the aged who say they are the "sickest"—ten per cent of the older population—are the heaviest users of medical services. They made up 20 per cent of all those who had seen a doctor during the four-week period preceding the interview. Seventeen per cent had been hospitalized at least once during the preceding year; nearly a third had had substantial home nursing care. In other words, ten per cent of all older people use from 17 to 31 per cent of available medical services.

The author of the report, Dr. Ethel Shanas of the University of Chicago, summarized her findings for MEDICAL WORLD NEWS: "Our study shows that in a month's time, some 20 per cent of older patients will be very sick. They'll probably be repeaters. They'll have many complaints and the doctor will see them often. But fully 80 per cent of his older patients will come from the much larger group who consider themselves to be basically healthy."

According to Dr. Shanas, comparisons between the very sick and the rest of the older population indicate that the very sick represent an extreme group. "The aged who come into a physician's office naturally help form his concept of what older people are like, what they need. But because physicians see all segments of the older population, they should be less likely than laymen to attribute the characteristics of a small number of older persons to all older persons." ■


to cope with the capriciouspa

RELIEVES THE SYMPTOMS OF BRONCHIAL ASTHMA

the wheezing, dyspnea, acute emphysema, defective pulmonary function, and hypoxia

DECADRON often eliminates or rapidly reduces dyspnea and significantly diminishes objective findings of acute emphysema. Further, dexamethasone increases cardiopulmonary efficiency, improves alveolar ventilation, and reduces hypoxia.[1-3]

ATTACKS THE ALLERGIC PROCESS IN BRONCHIAL ASTHMA

the impaired capillary permeability, the mucous membrane edema, the smooth muscle spasm, and decreased airway patency

Reports indicate that treatment with DECADRON can be expected to restore normal capillary permeability and relieve mucosal edema, to correct bronchospasm, and increase airway patency.[2-6]

IMPROVES THE GENERAL STATE AND SENSE OF HEALTH

Fatigue, loss of sleep, and inadequate nutrition rapidly debilitate the patient in severe or persistent asthma.

(Cecil, R. L., and Loeb, R. F.: A Textbook of Medicine, ed. 10, Philadelphia, W. B. Saunders Company, 1959, p. 439.)

The "tonic effect" [7] of dexamethasone often promotes a sense of well-being, leading to improvement in the general state of health, and restoration of normal nutrition and enjoyment of food.[2, 7-11] When corticosteroids are indicated in bronchial asthma, DECADRON is a *"medication of choice."* [2]

uspattern of bronchial asthma

REFERENCES:

1. Ricciardi, S., et al.: Minerva med. *50*:946, 1959. 2. Cagli, V., et al.: Minerva med. *50*:941, 1959. 3. Bickerman, H. A., et al.: Physiologic and steroid therapy in respiratory disease, Scientific Exhibit, A.M.A. Convention, Atlantic City, New Jersey, June 8-12, 1959. 4. Krantz, J. C., Jr.: Pennsylvania M. J. *62*:1817, 1959. 5. Beck, G. J.: Pre- and postoperative management of patients with bronchopulmonary disease, Scientific Exhibit, A.M.A. Convention, Atlantic City, New Jersey, June 8-12, 1959. 6. Barach, A. L., and Pons, E. R., Jr.: Ann. New York Acad. Sc. *82* (Art. 4): 963, 1959. 7. Rudolph, J. A., and Rudolph, B. M.: Ann. Allergy *17*:710, 1959. 8. Galli, T., and Mannetti, C.: Minerva med. *50*:949, 1959. 9. Spies, T. D., et al.: South. M. J. *51*:1066, 1958. 10. Cerutti, P.: Minerva med. *50*:917, 1959. 11. Chervinsky, P.: Ann. Allergy *17*:714, 1959.

Initial dosage depends on the type and severity of the condition. Generally between 1.5 mg. and 3 mg. per day is adequate; this should be reduced to maintenance level when control has been established. DECADRON is supplied as 0.75-mg. and 0.5-mg. scored, pentagon-shaped tablets and as Injection DECADRON Phosphate in 5-cc. vials, each cc. containing 4 mg. of dexamethasone 21-phosphate as the disodium salt. Additional information available to physicians on request.

Decadron®

DEXAMETHASONE

TREATS MORE PATIENTS MORE EFFECTIVELY

MSD MERCK SHARP & DOHME • Division of Merck & Co., INC., West Point, Pa.

Editor's Choice

ONCE AN ULCER, ALMOST ALWAYS AN ULCER

A child with a duodenal ulcer has a 50-50 chance of having an ulcer when he gets to be an adolescent or an adult. Of 92 children diagnosed as having an ulcer between the ages of 14 days and 14 years, 53 became asymptomatic after four weeks of medical treatment and 39 had recurrent symptoms within five years or less. Follow-up of 44 of these patients when they were 15 to 37 years old disclosed that 22 had chronic or recurrent symptoms; 22 had been asymptomatic since their original episode.

Age at onset of symptoms may show a correlation with recurrence. Among patients whose ulcer was discovered between the ages of five and nine, only 30 per cent had recurring symptoms, whereas approximately 50 per cent of those diagnosed between ten and 14 had recurring symptoms.

Initial complaints were abdominal pain, vomiting, hematemesis, melena and anemia. Pain seldom bore any relation to meals, although almost half of the children had pain that awakened them at night. Twenty-two had an emotional disorder manifested by enuresis, anxiety, obesity or behavior problems. *Michener, Kennedy and DuShane; AMA Jour. Dis. Child., Dec. 1960, pp. 8-11.*

THROMBIN INJECTION LEADS TO BLEEDING TENDENCY

The course of blood transfusions still sometimes fails to run smoothly. Alterations in blood coagulability after injection of incompatible blood have raised many questions.

Some of these have now been answered, at least in part, by the experimental intra-aortic injection of thrombin in dogs. This leads to intravascular clotting in both the abdominal organs and the lungs. Initially, platelet and white blood cell counts and fibrinogen levels decrease because these elements are used up in the clotting process. Then, paradoxically, a bleeding tendency occurs after about 20 minutes. Heparin-like substances and fibrinolysin appear in the blood, probably in response to the animal's attempt to defend itself from further clotting and in order to dissolve clots that have already formed.

The same effects—except for the marked production of fibrinolysin—are seen after injection of incompatible blood. These phenomena may explain the bleeding tendency noted at times during major surgery, obstetrical complications and acute traumatic or infectious states, and may also clarify the beneficial action of trypsin in some of these conditions. *Hardaway, Watson and Weiss; AMA Arch. Surg., Dec. 1960, pp. 155-63.*

PSYCHIC DISTURBANCE NOT CAUSED BY CORTISONE

Mental disturbance of varying degrees has often been observed in lupus erythematosus patients treated with cortisone or similar compounds, but the assumption that these drugs induce the aberration may be in error.

In three patients with lupus erythematosus, corticosteroids played an altogether different role. In one, a psychosis developed—compatible with a diagnosis of acute brain syndrome—on two occasions. Both times, the patient improved mentally and physically when given adequate amounts of corticosteroids. In the second case, the disease had a more insidious onset but was finally treated with steroids. Mental deterioration set in only when the patient was confronted with an emotionally stressful situation. Presumably, she had a borderline psychosis all along and may have had the same reaction to stress had steroids not been given. Variations in the course of the third patient's disease were accompanied by exacerbations and remissions of a psychotic syndrome attributed to cerebral infarction.

Since convulsive attacks may occur with lupus, electroencephalograms should be done prior to steroid therapy or to increases in dosage of such agents. If the reading is abnormal, anticonvulsants should be given along with corticoids. *Lief and Silverman; AMA Arch. Psychiat., Dec. 1960, pp. 40-43.*

DEFINITIVE SURGERY IS BEST FOR INTRACRANIAL ANEURYSMS

The usual grim forecast for victims of subarachnoid hemorrhage is improving. At the Mayo Clinic, the mortality rate for bleeding intracranial aneurysms dropped from 22.8 per cent prior to 1954 to 16 per cent between 1954 and 1959. During the latter period, 105 patients were treated surgically by craniotomy or carotid ligation or both. Craniotomy appears to carry less surgical risk and postoperative morbidity than extracranial ligation. Four of every five patients treated by craniotomy and complete obliteration of the aneurysm recovered, compared with two of every three treated by extracranial ligation.

Cross fill proved an inaccurate index of ability to withstand carotid ligation. Four patients with angiographic evidence of adequate cross-circulation were unable to tolerate clamping, while three patients with no apparent cross fill were successfully ligated.

Aneurysms of the anterior communicating artery complex are still the most difficult to treat, and they will probably continue to carry a high morbidity and mortality until a completely avascular field can be achieved, perhaps by means of extracorporeal circulation.

Generally, better results can be obtained if surgery is postponed for at least ten days after the last subarachnoid hemorrhage. *Uihlein and Lippert; AMA Arch. Surg., Dec. 1960, pp. 177-84.*

A STITCH IN TIME MAY MEAN MANY MORE LATER

The proverbial stitch in time is a waste rather than a saving in most cases of perforated peptic ulcer. Many surgeons in this country still believe that emergency treatment calls for the simple suture even though this cures only the perforation, not the ulcer.

European surgeons have suggested that definitive surgery would forestall the complications that often occur after the simple procedure. Three out of every four patients treated with simple suture have "significant additional ulcer trouble." Roughly, there is a correlation between the duration and severity of preperforation symptoms and prognosis after simple suture. Follow-up of 146 patients with chronic ulcers prior to perforation indicated that only about one-fourth remained well after the minimal procedure. This contrasts adversely with the usual smooth postoperative recovery and almost total absence of operative mortality with more extensive surgery. *Harbrecht and Hamilton; Ann. Surg., Dec. 1960, pp. 1044-48.*

Lifts depression...as it calms anxiety!

Smooth, balanced action lifts depression as it calms anxiety...rapidly and safely

Balances the mood – no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient – *they often aggravate anxiety and tension.*

And although amphetamine-barbiturate combinations may counteract excessive stimulation – *they often deepen depression.*

In contrast to such "seesaw" effects, Deprol's smooth, *balanced* action lifts depression as it calms anxiety – both at the same time.

Acts swiftly – the patient often feels better, sleeps better, within a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly – often within a few days. Thus, the expense to the patient of long-term drug therapy can be avoided.

Acts safely – no danger of liver damage. Deprol does not produce liver damage, hypotension, psychotic reactions or changes in sexual function – frequently reported with other antidepressant drugs.

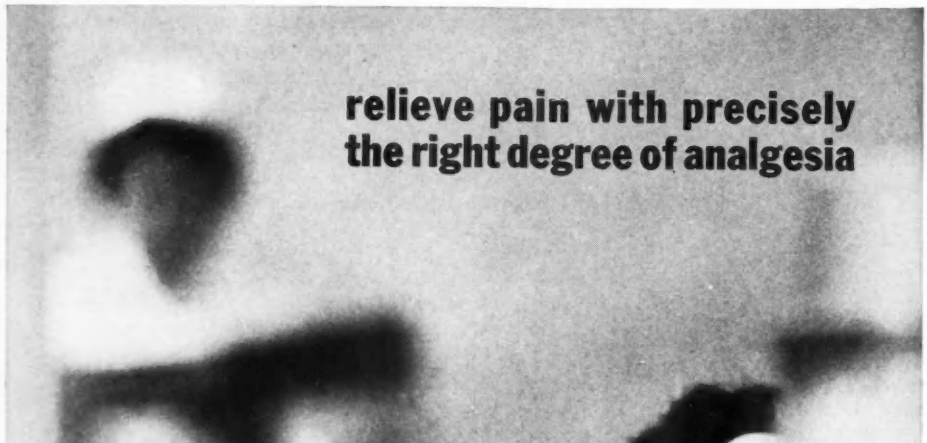
Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate. **Supplied:** Bottles of 50 light-pink, scored tablets. Write for literature and samples.

▲Deprol▲®

WALLACE LABORATORIES/

©D-2125



control moderate to severe pain 'Empirin' Compound and 'Empirin' Compound with Codeine Phosphate products provide pinpoint control, anywhere along the pain scale, for all intensities up to that which requires morphine—**without narcotic excess.** For effective analgesic, antipyretic and antitussive action, prescribe the 'Empirin' Compound that suits your purpose best.

'Tabloid'
'EMPIRIN' COMPOUND®

Acetophenetidin	gr. 2½
Acetylsalicylic Acid	gr. 3½
Caffeine	gr. ½

'Tabloid'
'EMPIRIN' COMPOUND® with CODEINE PHOSPHATE*

No. 1 — Codeine Phosphate	gr. ⅛
No. 2 — Codeine Phosphate	gr. ¼
No. 3 — Codeine Phosphate	gr. ½
No. 4 — Codeine Phosphate	gr. 1

*Subject to Federal Narcotic Regulations.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

Scissors & Scalpel

GASTROPODOMETER

How long is a coon's age? How quick is a wink? How far is a stone's throw?

Until now, these metaphorical measures of things were woefully inexact—a situation not to be tolerated in an age of science. So a brave beginning in eliminating such fuzzy descriptions has been made by the National Geographic Society. It put a gastropod on a treadmill and came up with this information:

A snail's pace is exactly 0.000030-602 miles per hour—half an inch a minute. (Well, of course, that's just an average, says the National Geographic Society. Some sluggish snails lag behind, while a really zippy one can make a three-inch trip in just one minute flat.)

UPRIGHT UPBRINGING

When pulling at their bottles, babies three months and under should follow the golden rule of any experienced drinking man—do it on your feet.

The vertical position prevents any sudden gush of liquid from the bottle entering the postnasal-space and setting up an infection of the middle ear, advises Dr. R. Bruce Duncan of Wellington, New Zealand.

Dr. Duncan, reporting his findings in a recent issue of the *Archives of Otolaryngology*, bases his recommendation on a study of 242 infants who showed an association between ear inflammations and the presence of milk in the cleft of the middle ear. "A supine position of an infant while bottle-feeding is a predisposing factor," the New Zealander concluded.

SHOO OFF

A style of lady's shoe, called a "winkle-picker" because of its pointed toe and unusually short vamp, has been responsible for cases of tenosynovitis of the long extensor tendon.

Letter in
British Medical Journal

Winkle-picker, pointed toe,
Stamp of fashion, charming show,
But the toe-cap cuts the dorsum,
Binds the long extensor tendon,
So says Mr. J. N. Wilson,
English orthopedic surgeon.
Thus, for symptomatic ease,
Winkle out the winkle-picker.
Take some steps and that right soon
In other and less winkled shoon.

BALL, CHAIN AND BABY

Many a married man is glad of the chance to get an occasional night off from the domestic round, but not John Quinn of Arcata, Calif. He chained himself to his wife Carol while she was in the delivery room of a local hospital so he could witness the birth of his child.

As proceedings reached their climax, Mr. Quinn was ordered to leave by Dr. Harry R. Frank, at which point he pulled an 18-inch chain from his pocket, looped it over his wife's wrist and snapped a lock on it.

An eight-pound boy was delivered without complications. Then the padlocked papa produced a key, unlocked himself and walked out.

HARD-BITTEN

If he's hounded by his medical expenses, the U. S. citizen might take thought that "man's best friends" annually add a $5,000,000 bite to the family medical bill.

So estimates the Public Health Service. In a joint survey with the World Health Organization, it found that in a 12-month period U. S. dogs bit 611,500 persons.

MORE LIGHT ON THE SUBJECT

Dr. George A. Perera, professor of medicine at the College of Physicians and Surgeons, Columbia University, takes a dim view of the way some people perform statistical sleights-of-hand.

"The insurance companies," comments the New York City physician, "are using figures on hypertension the way a drunk uses a lamppost—more for support than for illumination."

Product News

IN GYNECOLOGIC DISORDERS

Provera (Upjohn), a new progestational agent, may be administered orally or intramuscularly. Ora! *Provera* is indicated for treatment of dysmenorrhea, secondary amenorrhea and functional uterine bleeding. It also provides a simple oral test for pregnancy. *Depo-Provera*, an aqueous suspension for intramuscular injection, produces progestational effects for up to 16 days. It is indicated in endometriosis and as a means of delaying bleeding prior to gynecologic surgery. Either form may be used to prevent habitual or threatened abortion.

Provera has produced no untoward systemic effects or signs of estrogenic or androgenic activity in clinical use but it possesses some adrenocorticoid-like activity, and patients taking large doses for prolonged periods should be carefully observed. *Depo-Provera* is contraindicated in functional uterine bleeding.

Dosage depends on the condition being treated. *Provera* is supplied in 2.5 and 10 mg tablets in bottles of 25, *Depo-Provera* in 1 and 5 cc vials containing 50 mg per cc.

IN PREGNANCY

Natorexic (Walker), a prenatal vitamin-mineral combination containing an anorexic, diethylpropion, supplements nutrition and helps control excessive weight-gain in pregnancy and lactation. Diethylpropion has virtually no effect on the central nervous system, does not affect the heart, blood pressure or respiration, or cause insomnia. Clinical studies have shown that it is harmless to the fetus. Dosage is one tablet taken three times a day one hour before meals. A fourth may be taken at mid-evening, if desired. Each tablet contains 25 mg diethylpropion. Available by prescription.

FOR TREATMENT OF GLAUCOMA

Oratrol (Alcon) is an orally effective carbonic anhydrase inhibitor, dichlorphenamide, indicated in chronic simple, acute congestive and secondary, or acute phase, glaucoma. When given with miotics it controls glaucoma for prolonged periods.

Side effects characteristic of carbonic anhydrase inhibitors may occur, particularly in patients on high dosage schedules. They can be relieved by lowering the dosage or temporarily discontinuing the drug.

Dosage must be adjusted to individual requirements. Supplied as 50 mg tablets in bottles of 100.

high-performance
oral antibiotic

quickly returned him to his job . . .

DARCIL®

Phenethicillin Potassium, Wyeth

for an added measure of assurance.....

.....reliable absorption

consistently high peak serum levels

lethal action against the commonly encountered pneumococci, streptococci, and gonococci

lethal action also against clinical isolates of certain Staph. aureus resistant to other antibiotics

Wyeth Laboratories Philadelphia 1, Pa.

Reliable Absorption Promises Consistent Effectiveness

Numerous investigators have shown that the absorption of oral antibiotics varies not only from subject to subject, but also in the same subject at different times. To provide a high degree of therapeutic assurance, therefore, requires an antibiotic that is on the average well absorbed. High absorption, of course, implies high serum concentrations which, in turn, means an increased likelihood that tissues will be supplied with adequate antibiotic.

The absorption of phenethicillin potassium (DARCIL) has been investigated both by studies of serum concentrations and urinary excretion rates.

Maximum Absorption Indicated by Prompt, High Peak Serum Levels. Blood level studies demonstrate the reliable absorption of phenethicillin potassium. In studies employing single oral doses of 250 mg. of phenethicillin potassium, Morigi and associates[1] determined that peak serum levels of the antibiotic were attained within an hour after ingestion; assayable levels were maintained for 4 to 6 hours. Knudsen and Rolinson,[2] among others, have also demonstrated that phenethicillin potassium produces unusually high blood levels.

Serum Levels Directly Reflect Dose Levels. Cronk and associates[3] performed an interesting experiment that emphasizes the absorption of phenethicillin potassium. Phenethicillin potassium was given to healthy adults in progressively increasing doses. *The resultant serum levels were directly proportional to the doses given.*

Average Serum Concentration ½ Hr. after Administration

Dose (Mg.)	*Mcg./Ml.*	*Units/Ml.*
134	2.72	4.35
268	4.28	6.85
536	8.15	13.0
804	12.3	19.7
1072	19.1	30.6
2144	39.6	63.4

Therefore, when treating a patient with a severe infection, the physician may, by adequately increasing the dose, produce serum concentrations that should be sufficiently great to affect less susceptible pathogens.

Excellent Absorption Indicated by Urinary Excretion Studies. Knudsen and Rolinson,[2] in a study of 9 fasting subjects, reported that a mean of 60% of the dose of phenethicillin potassium was excreted in the urine within 6 hours after ingestion of the drug. Cronk and associates[3] found a lower, although still high, rate: 24 to 35% of a given dose of phenethicillin potassium was excreted in the first 6 hours; almost three-quarters of this percentage was excreted in the first 2 hours alone. Morigi and associates[1] collected urines of 10 healthy subjects at 6-hour intervals following a dose given one hour before meals. As can be seen, the excretory rate of phenethicillin potassium reflects prompt absorption and utilization.

Average Urine Concentrations Following a Single Oral Dose of 250 mg. Phenethicillin Potassium

	0-6 Hrs.	*6-12 Hrs.*	*12-24 Hrs.*
phenethicillin potassium	30.9%	0.4%	0%

References: 1. Morigi, E.M.E., Wheatley, W.B., and Albright, H.: Antibiotics Ann., 1959-60, pp. 127-132. 2. Knudsen, E.T., and Rolinson, G.N.: Lancet 2:1105 (Dec. 19) 1959. 3. Cronk, G.A., Naumann, D.E., Albright, H., and Wheatley, W.B.: Antibiotics Ann., 1959-1960, pp. 133-145.

SUPPLIED: DARCIL Tablets (peach colored, scored)—250 mg. (400,000 units), 125 mg. (200,000 units) phenethicillin potassium, bottles of 36 and 100. DARCIL for Oral Solution—125 mg. (200,000 units) phenethicillin potassium per 5 cc. teaspoonful, bottle of powder to be reconstituted to 60 cc.

Although infrequent, adverse reactions to many modern drugs may occur. For further information on limitations, administration and prescribing of DARCIL, see descriptive literature or current Direction Circular.

Names in the News

POSTS AND AWARDS

Dr. Eric Oldberg, appointed president of the Chicago Board of Health, replacing the late Dr. Herbert N. Bundesen. He is head of the department of neurology and neurological surgery at the University of Illinois Medical School, and is president of the Orchestral Association, governing body of the Chicago Symphony.

Dr. Karl Folkers, executive director of fundamental research of the Merck Sharp & Dohme Research Laboratories, and leader of a group that isolated vitamin B_{12}, chosen president-elect, American Chemical Society.

Earl Ubell, science editor for the New York *Herald-Tribune,* and Philip Morrison, professor of physics at Cornell University, received the American Association for the Advancement of Science-Westinghouse Writing Award.

Dr. Charles M. Gray, Tampa, Fla., radiologist, named president-elect of the Radiological Society of North America, in Cincinnati.

Dr. Wiley M. Sams of Miami, Fla., elected president of the American Academy of Dermatology and Syphilology at the organization's annual meeting in Chicago.

OBITUARIES

Dr. William H. Smith, 91, on the faculty of the Harvard Medical School for 30 years and associated with Boston's Massachusetts General Hospital since 1895; Dec. 1, in Newton, Mass.

Dr. Philip Anderson Shaffer, 79, twice dean of the Washington University School of Medicine, discovered the iso-electric method of obtaining insulin from the pancreas and helped create the Coleman-Shaffer diet in the treatment of typhoid fever; Dec. 4, in St. Louis.

Dr. John H. Hewitt, 77, one-time president of the Indiana State Board of Health and Indiana State Senator; Dec. 9, in Washington, D. C.

Dr. Edward S. Godfrey, Jr., 81, New York State Health Commissioner for 11 years, professor of preventive medicine and public health at Albany Medical College and founder and past-president of the American Epidemiological Society; Dec. 13, in Oneonta, N. Y.

Dr. George K. Fenn, 70, former president of the Chicago Heart Association, professor of medicine at Northwestern University School of Medicine and chief of staff of St. Luke's Hospital, Chicago; Nov. 28, in Chicago.

Gov. Abraham A. Ribicoff, new Secretary of Health, Education and Welfare

The following evaluation of the new HEW Secretary was made in The New York Times *by Dr. Howard A. Rusk, member of MWN's Editorial Advisory Board.*

In appointing Gov. Abraham A. Ribicoff of Connecticut as Secretary of Health, Education and Welfare, President-elect John F. Kennedy has appointed an official highly regarded as an able administrator.

Here is his record on health and public welfare programs:

Formerly, independent agencies dealing with public health and medical treatment programs were consolidated into one State Department of Health, with a resulting improvement in the care and treatment of the mentally retarded, the chronically ill and the disabled.

Outlays for mental health were increased.

The public welfare program was modernized.

A state Commission on Services for Elderly Persons was created.

One of the nation's most comprehensive medical care programs for the aged was adopted.

Regulations for convalescent homes were strengthened.

The vocational rehabilitation program for handicapped persons was strengthened.

Most political observers in Connecticut believe that Governor Ribicoff's tremendous plurality in the 1958 Connecticut election resulted from many of these health, education and welfare programs. His plurality of 246,000 votes was by far the largest ever achieved by a Connecticut Governor.

He leaves the governorship with much more than an outstanding record in health, education and welfare behind him.

He spurred the widely known highway safety program, which he undertook despite grave misgivings by some party leaders, who feared his get-tough policy would be tantamount to political suicide.

But he stuck rigidly to his plan to deprive every convicted speeder of his license for thirty days. As a result, Connecticut highway deaths went down and down until in 1959, the state had the nation's lowest highway death rate.

In an interview last week, Governor Ribicoff said he hoped his Federal department could give more leadership to direct services, research and professional education in mental retardation and mental illness.

This could be expected, as these programs were emphasized in Connecticut while he was Governor.

In his first gubernatorial campaign in 1954, Mr. Ribicoff called for entirely free care in the state's welfare institutions. However, his recommendations were not followed by the Legislature.

In 1959 the Legislature enacted his proposals for a State Division on Mental Retardation, and state subsidies to day care centers, vocational centers and diagnostic clinics.

The Legislature also passed a bill sponsored by the Governor that provided for mandatory public school classes for the mentally retarded and limitations on the amounts to be collected for the care of patients in institutions.

In his new post, Governor Ribicoff can be expected to push for greater international cooperation and exchange in matters of health, education and welfare. ■

DOCTOR'S BUSINESS

Tax court sets new policy on interns

The tax court has just ruled that a son or daughter serving an internship cannot be claimed as a dependent—even though the parents may be contributing the major share of support. This means that parents of interns can no longer take the standard $600 tax deduction allowed for children who may be over 18 but are still completing their education. In a test case, the tax court said an intern is not enrolled in an educational institution, since hospitals have neither full-time faculties nor college-type curriculums. Therefore, being over 18, they can no longer be considered dependents. While the ruling applies to interns, it will probably be considered applicable to residents, too.

MD spurs medical journal airlift

"Colleagues Everywhere," a campaign to provide medical literature to doctors abroad, has been established by a Pennsylvania physician. A prescription blank with your signature, sent to Dr. Charles B. Daugherty of 603 Clay Ave., Jeannette, Pa., will be answered with the name of an overseas physician seeking American journals. Dr. Daugherty notes that the cost of sending the AMA "Journal" is only 24 cents, the specialty journals about 20 cents.

Disability rider to GI insurance offered

Veterans are missing a bet if they don't take advantage of disability income provisions offered by the National Service Life Insurance (GI) policies issued by the VA. For a very modest premium, the VA will pay $10 a month for each $1,000 of life insurance in the event of total disability. The payments, which can continue for life, are limited to a maximum $100 a month. Other major conditions: Total disability must occur before age 60 and payments cannot begin until six months after disability. Doctors should contact their local VA office.

Next year's business picture shapes up

When it takes office, the new Kennedy Administration will be faced with the problem of around 4,000,000 unemployed. And by mid-year it may hit 5,000,000. Most economists consider this rise a factor in differentiating between a "recession" and a "depression." The prospect is that business won't perk up until later in the year, when such factors as increased construction, more housing and stepped-up output are expected to put an end to the present slump.

attains
sustains
retains

extra
antibiotic
activity

DECL

attains activity levels promptly

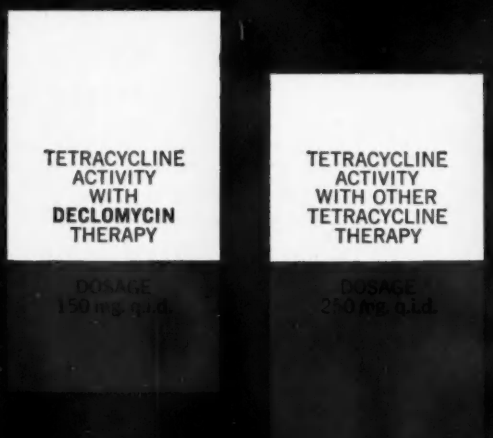
DECLOMYCIN Demethylchlortetracycline attains—usually within two hours—blood levels more than adequate to suppress susceptible pathogens—on daily dosages substantially lower than those required to elicit antibiotic activity of comparable intensity with other tetracyclines. The average, effective, adult daily dose of other tetracyclines is 1 Gm. With DECLOMYCIN, it is only 600 mg.

sustains activity levels evenly

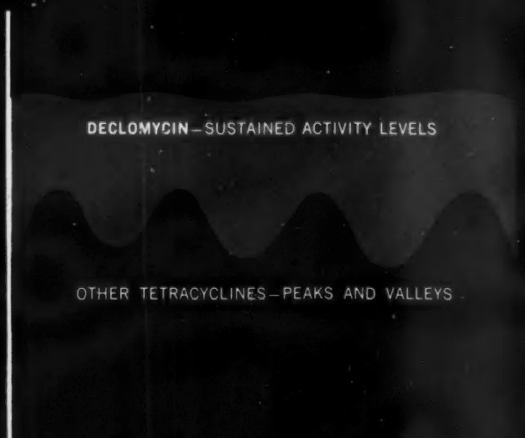
DECLOMYCIN Demethylchlortetracycline sustains, through the entire therapeutic course, the high activity levels needed to control the primary infection and to check secondary infection at the original—or at another—site. This combined action is usually sustained without the pronounced hour-to-hour, dose-to-dose, peak-and-valley fluctuations which characterize other tetracyclines.

ret
lev

DECL
tivity
given.
thus b
dosag
is the
dosag



POSITIVE ANTIBACTERIAL ACTION



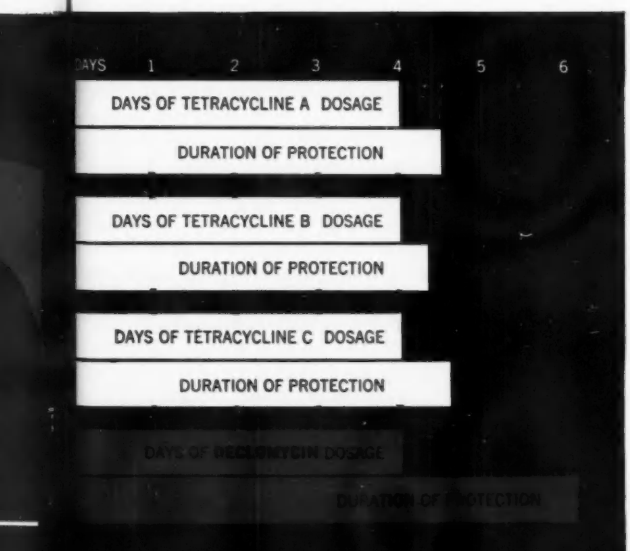
PROTECTION AGAINST PROBLEM PATHOGENS

CLOMYCIN®

DEMETHYLCHLORTETRACYCLINE LEDERLE

retains activity levels 24-48 hrs.

DECLOMYCIN Demethylchlortetracycline retains activity levels up to 48 hours after the last dose is given. At least a full, extra day of positive action may thus be confidently expected. The average, daily adult dosage for the average infection—1 capsule q.i.d.—is the same as with other tetracycline...but **total** dosage is lower and duration of action is longer.



CAPSULES, 150 mg., bottles of 16 and 100. **Dosage:** Average infections—1 capsule four times daily. Severe infections—Initial dose of 2 capsules, then 1 capsule every six hours.

PEDIATRIC DROPS, 60 mg./cc. in 10 cc. bottle with calibrated, plastic dropper. **Dosage:** 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into 4 doses.

SYRUP, 75 mg./5 cc. teaspoonful (cherry-flavored), bottles of 2 and 16 fl. oz. **Dosage:** 3 to 6 mg. per pound body weight per day—divided into 4 doses.

PRECAUTIONS—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics. The patient should be kept under constant observation.

Lederle

LEDERLE LABORATORIES
A Division of
AMERICAN CYANAMID COMPANY
Pearl River, New York

Letters t

HALF & HALF

I am always fascinated (and amused) by references to the "partial specialist" (MWN, Dec. 2, "Boom in Group Practice"). I have never yet heard this mongrel term meaningfully defined. Perhaps MWN can help me —just what is a "partial specialist"? Is he also, by definition, a "partial general practitioner"?

The term "partial specialist" always reminds me of the young lady who considered herself a "part-time prostitute."

WALTER H. KEMP
Director of Public Relations
The American Academy of General Practice
Kansas City, Mo.

[The AMA, in its official directory, gives a star to the physician who is not Board certified but who "claims his practice is limited to a particular branch of medicine," and no star to the partial specialist who is "especially interested" in a specialty "but does not limit his practice." Thus, as reader Kemp can see, the answer to his question is in the stars.—ED.]

MORE ON BIRTH CONTROL

For the past 41 years I have served the people of Connecticut, both as a practicing pediatrician and through the Connecticut State Medical Society. I have been active in the fight to eliminate our unenforceable contraceptive law. Hence, I am in a position to bring to the fore some pertinent facts.

1. Between 36 and 40 per cent of our population are Catholics.

2. In 1952, our birth rate was 20.5 per 1,000 population, the second lowest rate in the U.S. In 1949, Massachusetts, the only other state having a contraceptive law, had a birth rate of 20.0, lowest in the U.S., and Connecticut, 20.4, second lowest.

3. In 1947, Dr. Herbert Thoms, then professor of obstetrics, Yale Medical School, organized a committee of 100 physician-members of the Connecticut State Medical Society to survey physicians' attitudes about revision of the law. The ballots were sent to 2211 members of the Society to be returned, unsigned. Results: 1313 ballots returned. Favoring revision:

...er to the Editor

1232. Opposed: 81—the other members abstaining.

On March 11, 1947, I appeared before the Committee on Public Health and Safety of the state legislature and testified that 94 per cent of the physicians replying to our poll favored the Alsop bill.

The House of Delegates of the State Medical Society, on April 28, 1947, gave a loud affirmative vote, with a few scattered quiet negative votes, supporting the Alsop bill.

On May 7, 1947, the bill passed the lower house of the state legislature by a vote of 180 to 40.

On May 14th, the state senate's 36 members rejected the bill by a voice vote, without recording those voting "Yes" or "No."

O. L. STRINGFIELD, M.D.
Past President
Connecticut State Medical Society
Stamford, Conn.

With all the malpractice suits nowadays, it seems to me that a patient can be justified in suing a doctor who has refused her any birth control advice and a subsequent pregnancy has caused severe complications.

HARRY Y. KASABACH, M.D.
Detroit, Mich.

MARYLAND STUDY

I am writing to correct a statement reporting the results of a survey of physicians in Maryland, (MWN, Nov. 18).

This study was *not* submitted to Commissioner Sears to help persuade him to grant Blue Cross a 30 per cent raise.

The objectives of the study, and the only reason it was prepared, were as follows:

1. Ascertain whether patients requiring elective diagnostic procedures in the state of Maryland are being hospitalized in order that these procedures might be paid for by the Blue Cross insurance plan. In addition, if this practice is taking place, to obtain some idea of the extent to which it is going on.

2. Determine whether certain other uneconomical or unnecessary uses of hospital facilities are occurring and, if so, the extent to which they occur.

3. Determine the degree of acceptance, among physicians, of various proposals to hold down Blue Cross rates in the state of Maryland.

4. Ascertain whether physicians are in favor of extending Blue Shield benefits to include certain procedures not presently covered by Maryland Blue Shield contracts.

As a matter of fact, it could be said that the study was submitted to argue *against* a Blue Cross rate increase.

HUGH N. JONES
Director of Public Relations
The American College of Radiology
Chicago, Ill.

WORD OF PRAISE

I greatly appreciate receiving copies of your magazine.

I think your publication is of great value to the practicing physician because of the type of material you print and the way it is presented. Considering the deluge of publications we receive it is very gratifying to find the needle in the haystack.

ISADORE DRAPKIN, M.D.
Albany, N. Y.

BREAST CANCER

You carried the story of the x-ray examination of the breast as developed by Robert L. Egan, M.D. of Houston (MWN, Oct. 21). I am giving this article to read to those patients volunteering to have their breasts examined by this method. I am doing a preliminary series of 200 examinations without charge to the patient.

ALFRED O. MILLER, M.D.
Louisville, Ky.

BLUE CROSSED

I wish to take exception to statements made by Dr. Basil MacLean in his article (MWN, Nov. 4) "A Plan of Action for Blue Cross".

Pathology, radiology and anesthesiology are still the practice of medicine and not hospital service.

One sure way of causing medical insurance to skyrocket in cost is to insist that diagnostic procedures, which could be done on an out-patient basis, be done on an in-patient basis.

J. DUDLEY KING, M.D.
Crawford W. Long Memorial Hosp.
Atlanta, Ga.

MEETINGS

Jan. 16-18 American College of Surgeons, Sectional, *Birmingham, Ala.*
Jan. 18-20 American Diabetes Association, *New Orleans*
Jan. 19-20 Academy of Religion and Mental Health, *N.Y.C.*
Jan. 20-21 9th Annual Symposium on Blood, Wayne State University, *Detroit*
Jan. 23-25 American College of Surgeons, *Mexico City*
Jan. 23-25 All India Congress on Obstetrics and Gynecology, *Calcutta, India*
Jan. 26-28 Western Society for Clinical Research, *Carmel-by-the-Sea, Calif.*
Jan. 27-28 Cardiac Symposium, *Phoenix, Ariz.*
Jan. 27-28 Royal College of Physicians and Surgeons, *Ottawa, Canada*

UPCOMING

Apr. 17-20 Amer. Academy of General Practice, *Miami Beach*
Apr. 22-29 Int'l Academy of Pathology, *Chicago*

ADVERTISER INDEX

ACKNOWLEDGEMENTS: Cover, Associated Photographers; 6 Dr. W. M. Chardack; 7 Westinghouse; 20 Hahnemann Hospital; 21 Dr. A. L. Scherbel; 22-24, 27 Tony Kokinos; 32 Kay Harris; 33 Associated Photographers; 35 Univ. of Vermont; 38 Alfred & Fabris Studio; 39 Arthur Leipzig; 56 Joseph Merante

THE CHANGING IMAGE OF THE U. S. PHYSICIAN

Morris Fishbein, M.D.

Fifty years ago the doctor's image was that of the family practitioner —the kind of man Luke Fildes portrayed in his famous painting, calmly seated at the bedside of a child, assuming all the responsibility and not doing very much. But medical education, specialization, the development of the hospital as the center of medical practice, and the growth of voluntary insurance have all served to modify this nostalgic and romantic picture. Perhaps the public has not quite understood this.

With the coming of the machine age in medicine, the glassware of the laboratory, the paraphernalia of the operating room, the gadgetry of ophthalmologic and otorhinolaryngologic practice and the mysteries of the roentgen ray, the doctor required the help of technological specialists to make a diagnosis. Moreover, treatment changed. Instead of prescriptions containing great numbers of somewhat futile remedies, "magic bullets" were created heralding the beginning of modern chemotherapy. The public became aware of the possibilities of preventive medicine.

Man of Many Reactions

Today, many images of the doctor exist. There is still the general practitioner who sees a great variety of diseases, takes care of people in his office, in their homes and in the hospital, and makes the choice when special services are required.

And there is the less clear image of the specialist. Patients resent the week or two they must wait for an appointment, especially when the physician spends time out of town or simply away from his office. They question his charges, not realizing the tremendous increase in the cost of space in medical buildings and the substantial cost of the equipment he must have to keep pace with new advances in technology.

Another image is that of group practice. People dislike the business-like environment, the numerous questions, the all-too-frequent failure to feel that the doctor who is taking care of them is a person.

They look at the changes in hospitals, too. They long for the highly qualified efficient nurses whose numbers are steadily diminishing. They resent the bill, even if they have Blue Cross or other insurance, because there are always extras. And they wonder why the premiums cannot meet the total cost.

What A Doctor Is

Putting "images" aside, what *is* the doctor? He is a man who spent the first 30 years of his life achieving his education and qualification. He may be 40 before he really begins to earn a living. He has sacrificed early marriage, children, frequently his health, to engage in a profession which yields great incomes to a few, but to most, less than is earned by men who began working in trades at 20. He is a man subject to more social control by legislation, medical organizations, insurance organizations, hospitals, welfare groups and public opinion than a man or woman engaged in any other profession.

All sorts of money has been spent for public relations to show people this true image. Yet the doctor himself knows that the only image that really means anything to him is the image held by his own patients.

Morris Fishbein